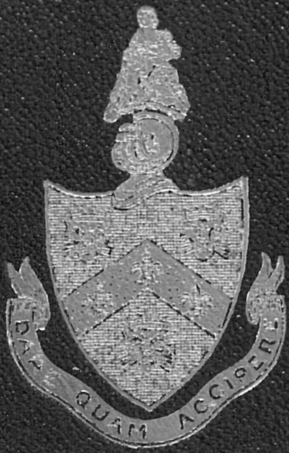
GUY'S
HOSPITAL
GAZETTE

NEW SERIES
VOL. 55

1941

DARE QUAM ACCIPERE

Guy's Hospital Gazette.


DARE QUAM ACCIPERE

Guy's Hospital Gazette.

GUY'S HOSPITAL GAZETTE

DARE QUAM ACCIPERE

VOL. LV

NEW SERIES

1941

INDEX.

PAGE

A

- Abscess, Dental, Cases of, which have Endangered Life, by F. N. Doubleday .. 122
- Actinomycosis, by N. L. Eckhoff 64
- Air-raid Casualties, Observations on, by R. T. Grant 90
- Air-raid Damage 13
- Albers, A. G. A.—
  - The Diagnosis of Gastric Carcinoma, Clinical aspects 212
- " America Revisited," by W. H. Ogilvie 31, 58, 71
- Antelectasis and Lobar Collapse, Bronchiectasis, by H. C. Cameron 27
- Appointments 49, 132, 196, 210, 220, 232, 300, 322
- Association Football Club 269
- Athletic Club 272
- Atkins, H. J. B.—
  - The Sulphonamides in Surgery 276
- Auricular Fibrillation, Thyrotoxic, by E. G. Slesinger 237
- Awards—*See* Honours.

B

- Baker, James, and Brown, P. T. E.—
  - A Case of Ectopic Testicle 159
- Barham, Anna M., Death of 313
- Basal Narcotics, by A. D. Marston 52
- Base Hospitals 149 161
  - See also Sector News.
- B.B.C. Broadcast 165
- Beaney Prize in Pathology, Award of 242
- Birthday Honours 172
- Births 24, 49, 62, 74, 88, 120, 160, 172, 210, 220, 242, 260, 288, 300, 322, 332
- Bishop, P. M. F.—
  - Farewell to the College 67
  - Gas at Guy's 184
- Blaikley, J. B., Appointed Assistant Obstetric Surgeon 187
- Blues, Award of 106
- Boxing 36
  - Inter-Hospital Contests 62
- Boxing and Gymnasium 272
- Bronchiectasis, Antelectasis and Lobar Collapse, by H. C. Cameron 27
- Brown, P. T. E., see Baker, James.
- Bull, F. Bocquet—
  - To Dental Students 249
- " Bundles for Britain "—
  - Deep X-ray Apparatus for Guy's .. 76
  - Hollywood Branch adopts Guy's 76

C

- Cameron, H. C.—
  - Child Guidance 198
  - Poliomyelitis 2
- Carcinoma, Gastric, The Diagnosis of, and Clinical Aspects by A. G. A. Albers .. 212
- Carnegie, D. M.,A Case of Cushing's Syndrome 201
- Case from Take-in 86

PAGE

- Casualties in the Services 88, 160
- Cauda Equina, Notes on War Injuries of the Spinal Cord and, by H. R. Harley .. 41
- Cervical Rib and Brachial Plexus Lesions, by Nils L. Eckhoff 136
- Change of Address 12, 36, 49, 62, 74, 88, 106, 120, 132, 148, 172, 186, 196, 210, 220, 232, 242, 260, 288, 300, 322, 332
- Chemotherapy, by John A. Ryle 222
- Chemotherapy in Gonorrhœa, by V. E. Lloyd 314
- Chemo-Therapy and the Middle Ear Cleft, by T. B. Layton 302
- Chemotherapy in Puerperal Infections, by G. F. Gibberd 290
- Child Guidance, by H. C. Cameron 198
- Clinical Lectures—
  - H. C. Cameron :
    - Child Guidance 198
  - F. N. Doubleday :
    - Cases of Dental Abscess which have Endangered Life 122
  - A. H. Douthwaite :
    - Tetanus 150
  - Nils L. Eckhoff :
    - Cervical Rib and Brachial Plexus Lesions 136
  - R. T. Grant :
    - Observations on Air-raid Casualties.. 90
  - Frank W. Law :
    - Ophthalmic Injuries in Warfare .. 15
  - T. B. Layton :
    - The Woman in the Little House .. 174
  - A. D. Marston :
    - Basal Narcotics 52
  - John A. Ryle :
    - Dyspnœa 162
    - Nosophobia 76
  - E. G. Slesinger :
    - Pancreatic Cysts 108
- Clinical Period, To Those Entering the, by A. H. Douthwaite 247
- Clinical Work at Guy's in War Time 248
- Clubs' Union 261, 267
- College, Farewell to the, P. M. F. Bishop .. 67
- Cooper, Sir Astley 261
- Correspondence—
  - " A Number of Students " :
    - Teaching 169
  - " Ardent Admirer " :
    - An Appreciation 207
  - H. J. B. Atkins :
    - An Appreciation 23
    - " Fair Play " 98
    - Rebuilding at Guy's 296
  - Charles Baker :
    - Rebuilding at Guy's 298
  - Thos. Barlow :
    - Royal Medical Benevolent Fund .. 284
  - P. M. F. Bishop :
    - Air Raid Distress Fund 98
    - " Farewell to the College," Erratum.. 119
    - Fire Spotters 22
    - Paper Salvage Week 321
    - Pembury Letter 116

PAGE

- Correspondence—*continued*
  - R. C. Brock :
    - Guy's Hospital Reports 84
    - Innominate Club 230
    - Rebuilding at Guy's 281, 319
  - F. Bocquet Bull :
    - Rebuilding of Guy's 319
  - S. Wilson Charles :
    - " Notes on the Growing Jaws," .. 140
  - Patrick Clarkson :
    - Rebuilding at Guy's 298
  - J. C. Colbeck :
    - Replacement of Destroyed Books .. 127
    - Sonne Dysentery 68
  - " Cosmos " :
    - A Plan for the Post-War Guy's .. 96
  - M. C. Cross :
    - " A Plan for a Post-War Guy's " .. 128
  - A. H. Douthwaite :
    - Prevention of Tetanus 184
  - N. L. Eckhoff :
    - Books on Surgery for Dental Students 98
    - The Four-Tailed Bandage 10
  - Joan Epps :
    - " Evacuees of Orpington " 117
  - " The Evacuees of Orpington " :
    - *Re* Food 98
  - R. H. Fagge :
    - " Farewell to the College " 97
  - " Fair Play " :
    - Graded Meals 85, 117
  - H. B. Fenn :
    - Inter-Hospital Boxing 69
  - C. W. Goodhart :
    - Trainees in Pathology 69
  - John Gordon :
    - " A Plan for a Post-War Guy's " .. 140
  - A. E. Grace :
    - Rebuilding at Guy's 298
  - " G. T. H." :
    - The Innominate Club 229
  - Adrian Hill :
    - Rebuilding at Guy's 299
  - T. H. Hills :
    - A Barium Meal Emulsion 283
  - House Appointments 227
  - N. M. Jacoby :
    - " Pembury Letter " 128
  - T. B. Johnston :
    - House Appointments 228
    - Rebuilding of Guy's 310
  - A. H. B. Kirkman :
    - Status Epilepticus—Septic Pneumonia —Hyperpyrexia 206
  - R. U. Kynaston, M. R. Mullins, D. M. Strathie and A. G. Albers :
    - Rugby Football Club Centenary .. 129
  - D. Leeming :
    - Miniature Radiography 283
  - W. M. Mollison :
    - " Farewell to the College " 84
  - J. M. Munden :
    - Rebuilding of Guy's 312
  - " Nemlaz " :
    - Entry of First Year Students .. 23
  - Lord Nuffield :
    - Lord Nuffield's Appreciation .. 33
  - Humphrey Osmond :
    - Criticism 58

PAGE

- Correspondence—*continued*
  - Vaughan Pendred :
    - " Farewell to the College," 127
  - Norman A. Punt :
    - " Guy's Letter " 130
    - Rebuilding at Guy's 299
  - J. W. Shackle :
    - " Trainees " in Pathology for the E.M.S. 22, 49
  - A. Sharp :
    - " Tetanus " 170
  - T. Sidney :
    - Guild of Ex-Patients 130
  - E. G. Slesinger :
    - Rebuilding at Guy's 296
  - R. E. Smith :
    - Prevention of Tetanus 170
  - H. C. Still :
    - Rebuilding at Guy's 299
  - The Students' Committee :
    - Appreciation 129
  - Florence Taylor :
    - The Farnborough Letter 34
    - Rebuilding of Guy's 311
  - A. R. Thompson :
    - The Measurement of Lakes and Mountains 171
  - Hilda M. Woodwark :
    - The Ladies' Guild of the Royal Medical Benevolent Fund 242
  - G. Payling Wright :
    - " Trainees " in Pathology for the E.M.S. 33, 58, 85
    - Erratum 90
- Cricket Club 270
  - Averages, 1941 208
  - *v.* A.F.S. (55th Division) 184
  - *v.* Beckenham 195
  - *v.* C. Burton's XI 171
  - *v.* London Fire Services 184
  - *v.* London Hospital 171
  - *v.* Metropolitan Police (" A " Division) .. 185
  - *v.* O.C.T.U. 171
  - *v.* The Press 196
  - *v.* Public Schools 171
  - *v.* St. Mary's Hospital 171
  - *v.* Southgate 172
  - *v.* The Wanderers 171
- Cysts, Pancreatic, by E. G. Slesinger 108
- Cushing's Syndrome, A Case of, by D. M. Carnegie 201

D

- Deaths 12, 24, 36, 49, 62, 74, 88, 106, 120, 132, 148, 172, 186, 210, 220, 242, 288, 300, 322, 332
  - In the Services 106
- Dental Abscess, Cases of, which have Endangered Life, by F. N. Doubleday .. 122
- Dental Dinner and Dance 288
- Dental Officer 218
- Dental School, Prize Examinations 220
- Dental Skiagrams, Interpretations of, by the Doctor, by F. N. Doubleday 304
- Dental Society 273
  - R. B. Rix :
    - Notes on the Growing Jaws, Presidential Address 111

PAGE
Dental Students, by F. Bocquet Bull 249
Dermatology, Sulphonamides in, by David Erskine 324
Diverticulum, Meckel's, by N. L. Eckhoff .. 188
Doubleday, F. N.—
  Cases of Dental Abscess which have Endangered Life 122
  The Interpretations of Dental Skiagrams by the Doctor 304
Douthwaite, A. H.—.
  Tetanus 150
  The Use of Sulphonamides in General Medicine 262
  To Those Entering the Clinical Period .. 247
Dowsett, Colonel E. B. A Trip to Egypt in War Time 141, 156
Dyspnœa, by John A. Ryle 162

E

Eckhoff, N. L. :
  Actinomycosis 64
  Cervical Rib and Brachial Plexus Lesions 136
  Meckel's Diverticulum 188
Ectopic Testicle, A Case of, by James Baker and P. T. E. Brown 159
Egypt, A Trip to, in War Time, by Colonel E. B. Dowsett 141, 156
Emergency Doctor in the R.A.M.C. ..205, 219
E.M.S. 323
Erskine, David. The Sulphonamides in Dermatology 324
Evening on the Thames 219
Eyes in Infancy, Some Affections of, by O. G. Morgan 224

F

Farnborough Letter 8, 21, 30, 57, 70, 83, 96, 114, 126, 139, 155, 169, 196, 204, 216, 240, 266, 279, 307, 329
Flag Day 147
Football—
  Association 269
  Rugby 269, 300
    Chart and Statistics, 1940–41 .. 146
    Fixtures, Season 1941–42 .. ..288, 300
    Review of Season 1940-41 .. 145
    v. Aldershot Command 60
    v. An Army XV 130
    v. Bedford 118
    v. Cambridge University 61
    Inter-Hospitals Seven-a-side Tournament 131
    v. King's College Hospital 286
    v. London Anti-Aircraft XV .. 331
    v. London Hospital 87
    Middlesex County Seven-a-side Competition 132
    v. Middlesex Hospital 286
    v. New Zealand Army XV .. 34
    Old Mid-Whitgiftians Seven-a-side Competition 132
    v. Public Schools 35
    v. Rosslyn Park 72
    v. St. Mary's Hospital 73
    v. St. Thomas's Hospital 119, 330
    v. Wasps 11, 87
Forsyth, Mrs. David, Obituary 26

G

Gas Attacks 107
Gas at Guy's 180
  Mock Attack 221
Gastric Carcinoma. The Diagnosis of, and Clinical Aspects, by A. G. A. Albers 212
Gibberd, G. F., The New Chemotherapy in Puerperal Infections 290
Gillespie, R. D. :
  Psychneuroses and other Mental Conditions arising out of the War 38
  Visit to U.S.A. 290
Golding-Bird Medal and Prize in Bacteriology 220
Golfing Society 270
  Students and Staff *v.* Addington Golf Club 321
Gonorrhœa, Chemotherapy in, by V. E. Lloyd 314
Grant, R. T., Observations on Air Raid Casualties 90
Growing Jaws, Notes on the, by R. B. Rix .. 111
Guild of Ex-Patients 212
Guy's Hospital, Demolition at 221, 275
  Memories of 284
  Men in the Forces 322
  Re-building of 301, 313
  (*see also Correspondence*)
  South African Aid for, and the Borough .. 136
  War Damage to 107
Guy's Letter 7, 20, 30, 47, 56, 70, 82, 96, 114, 125, 138, 154 168, 178, 193, 203, 216, 226, 240, 250, 265, 278, 306, 328
  In War Time, Clinical Work at 248

H

Hare and Hounds 272
Harley, H. R., Notes on War Injuries of the Spinal Cord and Cauda Equina .. 41
Health Education, Central Council for .. 233
Hockey Club 269
  Guy's (Tunbridge Wells) *v.* Bart.'s .. 287
Honours 12, 62, 196
  Birthday 172
  C.I.E. New Year's Honours 12
  M.B.E. 62, 332
  Naval Commendation 288
  O.B.E. 148
House Officers, Appointment of, at Guy's .. 221

I

Illustration, R. D. Gillespie 280
  The " Wildernesse " 76
Infancy, Eyes in, Some Affections of, by O. G. Morgan 224

J

Jaws, Growing, Notes on the, by R. B. Rix .. 111

K

Knott, F. A.—
  Elected F.R.C.P. 108
  On the Mechanism and Limitations of Sulphanilamide Treatment 234

PAGE

L

Law, Frank W., Ophthalmic Injuries in Warfare 15
Lawn Tennis Club 270
Layton, T. B.—
  Chemo-Therapy and the Middle Ear Cleft 302
  The Woman in the Little House 174
Leonard Lubbock Prize in Clinical Pathology 220
Lintott, G. A. M., Obituary 5
Lloyd, V. E., Chemotherapy in Gonorrhœa 314
Lobar Collapse, Brochiectasis, Antelectasis and, by H. C. Cameron 27

M

Marriages 12, 24, 36, 49, 196, 232, 242, 260, 288, 332
Mechanism and Limitations of Sulphanilamide Treatment, by F. A. Knott 234
Meckel's Diverticulum, by N. L. Eckloff 188
Mental Conditions, Psychoneuroses and Other, arising out of the War, by R. D. Gillespie 58
Mentioned in Despatches 12, 62, 88, 196
Middle Ear Cleft, Chemo-Therapy and the, by T. B. Layton 302
Missing 288
Morgan, O. G., Some Affections of the Eyes in Infancy 224
Mutch, N., Sulphonamide Derivatives 244

N

Narcotics, Basal, by A. D. Marston 52
Netball Club 11
Nosophobia, by John A. Ryle 76
Notice, Beaney Prize in Pathology, Award 242
  Caldecote Hall, Nuneaton 242
  Dental Dinner and Dance 288
  " Farewell to the College," Erratum 119
  The Guy's Annexe at the Wildernesse 172
  Guy's Hospital Dental School, Scholarships in Arts and Science 209
  Medical School, Scholarships in Arts
  Mental Conditions arising out of the War 38
  and Science, Awards 209
  Out-patient Appointments 231
  Society of Apothecaries of London 24, 49, 74, 106, 132, 172, 196, 260
  Treasurer's Medal and Prize in Clinical Medicine, Award 242
  Treasurer's Medal and Prize in Clinical Surgery, Award 242
  The Wills Library 148
Nursing Profession, To Those Entering 250

O

Obituary—
  David Forsyth 26
  Major G. A. M. Lintott 5
  Frank Thomas Paul 38
  R. Wynne Rouw 234
  Isidore Samuels 314
Ogilvie, W. H., America Revisited 31, 58, 71
Ophthalmic Injuries in Warfare, by Frank W. Law 15

PAGE

Orpington Letter 8, 20, 48, 84, 115, 125, 139, 155, 169, 178, 194, 217, 226, 241, 251, 267, 279, 307, 329
Out-patients 289
  Appointments 231, 233

P

Pancreatic Cysts, by E. G. Slesinger 108
Papers by Guy's Men 12, 36, 62, 74, 88, 148, 160, 186, 196, 210, 232, 260, 288, 300, 322, 332
Pass List, Conjoint Board 74, 120, 185, 196, 210, 332
  Royal College of Physicians 300
    F.R.C.P. 160
  Royal College of Surgeons, F.R.C.S. 172, 332
    L.D.S. 36, 74, 185, 186, 322
  Society of Apothecaries of London 12, 106, 172, 186, 242, 322
  University of Cambridge, M.B. 88, 172, 186, 196, 210, 332
  University of London, B.D.S. 232
    D.Sc. 62
    M.B., B.S. 12, 24, 120, 232, 321
    M.D. 24, 242
    M.S. 210
    Ph.D. 120
  University of Oxford, M.D. 300
Passim 1, 13, 25, 37, 51, 63, 75, 107, 121, 133, 149, 161, 175, 187, 197, 211, 221, 233, 243, 261, 275, 289, 301, 313, 323
Paul, Frank Thomas, Obituary 38
Pembury Letter 8, 20, 31, 47, 56, 70, 83, 96, 115, 126, 139, 155, 168, 179, 194, 203, 216, 240, 251, 266, 294, 318
Periodicals, Foreign 90
Pharmaceutical Department 289, 295
Physical Society 272
  A. G. A. Albers, The Diagnosis of Gastric Carcinoma—Clinical Aspects 212
Physiological Society 273
Poliomyelitis, by H. C. Cameron 2
Prisoners of War 12, 172, 210, 232, 242, 260, 288, 332
Psychological Medicine, York Clinic for, by R. D. Gillespie 166
Psychoneuroses and other Mental Conditions arising out of the War, by R. D. Gillespie 38
Puerperal Infections, The New Chemotherapy in, by G. F. Gibberd 290

R

R.A.M.C., An Emergency Doctor in 205, 219
  Clinical Meeting at Guy's 313
Recruits, The 274
Reviews—
  Alstead: Poulsson's Textbook of Pharmacology and Therapeutics 103
  Askwith: Keats 255
  Bailey: Pye's Surgical Handicraft 105
    Surgery of Modern Warfare 100
    Parts 2 and 3 44
    Surgery in Modern Warfare, Part 5 253
  Bainbridge and Menzies: Essentials of Physiology 206
  Bonnin: A Complete Outline of Fractures 207
  Box: Twelve Periodontal Studies 330
  Boyd: The Pathology of Internal Diseases 46

PAGE

- Reviews—*continued*
  - Brain: Diseases of the Nervous System 104
  - Browning: Modern Drugs in General Practice 102
  - Cade: Malignant Disease and its Treatment by Radium 101
  - Carter: Green and Twiss, Diseases of the Biliary Tract 144
  - Clayton: Actinotherapy and Diathermy for the Student 104
  - Comroe: Arthritis and Allied Conditions 102
  - Fearon: An Introduction to Biochemistry 106
  - Forrai: Inter-relation of Abdominal Diseases 103
  - Gaddum: Pharmacology 104
  - Gibberd: A Short Textbook of Midwifery 100
  - Guy's Hospital Reports 23, 273
  - Hines: Materia Medica and Pharmacology for Nurses 144
  - Hutchinson and Hunter: Clinical Methods 10
  - Joint Planning Committee of Dental Students, A Memorandum on the Nation's Dental Services 312
  - Lawrence: The Scientific Photographer 259
  - Macintosh and Pratt: Essentials of General Anæsthesia 45
  - Macphail: Model Answers for the "Preliminary" Nursing Examination 144
  - Moncrieff (Editor): A Textbook of Nursing and Diseases of Sick Children 286
  - Morton: Principal Drugs 160
  - Norton: Anatomy and Physiology for Junior Nurses 105
  - Packard: Hayes and Blanchet. Artificial Pneumothorax 231
  - Pearce: Anatomy and Physiology for Nurses 208
    - Fevers and Fever Nursing 105
    - Medical and Nursing Dictionary 312
    - Text-book of Nursing 330
  - Rolleston (Editor): The British Encyclopædia of Medical Practice 258
  - Rolleston and Moncrieff: Essentials of Modern Chemotherapy 207
  - Ross: Lectures on War Neuroses 254
  - Ross and Fairlie: Handbook of Ansthetics 105
  - Rosenthal: Diseases of the Digestive System 230
  - Ryle: Fears may be Liars 99
  - Scherf and Boyd: Clinical Electrocardiography 230
  - Speller: Law for Nurses and Nurse Administrators 46
  - Stafford-Clarke: Autumn Shadow and Other Poems 256
  - Stewart: Medical Handbook for Nurses 259
  - Taylor: General Nursing Questions and Answers 208
  - Watson-Jones: Fractures and other Bone and Joint Injuries 258
- Robins, Miss A. C., Awarded O.B.E. 134
- Rouw, R. Wynne, An Appreciation 244
  - Obituary 234
- Rowing Club 271
- Royal College of Nursing, 1916–1941 117
- Royal Medical Benevolent Fund, Ladies' Guild 242
- Russia, Medical Committee for 243
- Ryle, Professor J. A., Appointed a Consultant Advisor in Medicine in the E.M.S. 134
  - The New Chemotherapy 222
  - Dyspnœa 162
  - Nosophobia 76

PAGE

S

- Sailing Club 206, 219, 271
  - An Evening on the Thames 219
  - United Hospitals 211
- Samuels, Isidore, Obituary 314
- Sector Matron's Letter 5
- Sector News 7, 20, 30, 47, 70, 82, 96, 114, 125, 138, 154, 168, 178, 193, 203, 216, 226, 250, 265, 278, 294, 306, 318, 328
- Services, Casualties in 88, 160
- Shape of Things to Come, by "Stanley" 308
- Sherwood Park Letter 252, 267, 279, 307, 329
- Skin Diseases Common in War Time, Errata 12
- Slesinger, E. G., Thyrotoxic Auricular Fibrillation 237
- South African Aid for Guy's and the Borough 135
- Southern Letter 204, 217, 241, 252
- Spinal Cord, Notes on War Injuries of the, and Cauda Equina, by H. R. Harley 41
- Squash Club 209, 260, 271
- "Stanley."—Shape of Things to Come 308
- Stoneham, F. J. R., Corrigendum 260
- Students' Club 268
- Sulphanilamide Treatment, Mechanism and Limitations of, by F. A. Knott 234
- Sulphonamide Derivatives, by N. Mutch 244
  - In Dermatology, by David Erskine 324
- Sulphonamides 175
  - in General Medicine, The Use of, by A. H. Douthwaite 262
  - in Surgery, by H. J. B. Atkins 276
- Swimming-bath 162
- Swimming Club 272

T

- Take In, A Case from 86
- Testicle, Ectopic, A Case of, by James Baker and P. T. E. Brown 159
- Tetanus, by A. H. Douthwaite 150
- Thyrotoxic Auricular Fibrillation, by E. G. Slesinger 237
- Treasurer's Medal and Prize in Clinical Medicine, Award 242
  - Clinical Surgery, Award 242

U

- United States Doctors 107

W

- War Damage to Guy's 107
- War Injuries of the Spinal Cord and Cauda Equina, by H. R. Harley 41
- Wildernesse, Guy's Annexe at, Opening of 63, 161, 172
- Wildernesse Letter 179, 194, 227, 252, 267, 294, 318
- Wills Library 148
- Woman in the Little House, by T. B. Layton 174

X

- X-ray Diagnosis 243

Y

- York Clinic for Psychological Medicine, by R. D. Gillespie 166

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry
and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *11th January* 1941 *Number* 1369

Gazette office

PASSIM

Owing to certain circumstances, it is regretted that Passim must unadvoidably be held over until our next issue.

Poliomyelitis

By H. C. Cameron, Esq., M.D.

POLIOMYELITIS, because of the severity and permanency of the crippling which may result from it, is to-day perhaps the most dreaded by the general public of all infective disorders. The public knows that it is infectious and epidemic, and it seeks for protection against it and for cure of it. At the present time neither protection nor specific cure can be provided.

The first accurate and systematic account of the disease was written by Von Heine in 1840, while Medin, of Stockholm, in 1890 added much to our knowledge of its epidemicity. On the Continent the disease is commonly called the Heine-Medin Disease. In 1909 Landsteiner and Popper succeeded in communicating the infection to monkeys, and as a result a method was obtained by which various aspects of the disorder could be investigated, such as the method of entrance of the virus, the passage of the virus through the cerebro-spinal system, and the development of immunity.

The virus is present in the cerebro-spinal system of a monkey which has died of the disease, but it is not present in the blood, the cerebro-spinal fluid, or the other viscera. The inoculation of any individual takes place through the mucous membrane of the nose and naso-pharynx and so by the olfactory nerves to the cerebrum, whence it may pass to the medulla and spinal cord. The brain tissue has been found to have an action inimical to the virus, and it is common for the virus to fail to survive its passage through the brain. It dies out in the earlier stages of its journey and fails to reach the vulnerable area, the spinal cord. If it does reach the cord it multiplies and attacks especially the cells of the anterior cornua. In exceptional cases the brain tissue is itself attacked and the cerebral, or even more rarely the cerebellar, form of the disease results. When the virus does not survive its passage through the brain, and does not reach the medulla and cord, the so-called abortive case results. In the experimental disease in monkeys, abortive cases invariably show the presence of the virus in the brain but not in the cord. The absence of the virus from the viscera, the blood and the cerebro-spinal fluid in all cases of poliomyelitis forces the conclusion that throughout the entire course of the disease the symptoms are due to a virus that is strictly neurotrophic, and affects no other part of the body than the nervous system.

The effects upon the anterior cornual cells are in the first place a degeneration which may end in necrosis and death of the cell, or in recovery. All trace of the characteristic cornual cell may be lost and its place taken by proliferated neurological cells. During the acute stage, the toxic degeneration of the cellular elements is accompanied by intense œdema and congestion of the surrounding nerve tissue and of the overlying pia mater with, at times, numerous small hæmorrhagic foci. The posterior horns are by no means unaffected, although the evidence of damage is slight as compared to that in the anterior horns, and their involvement, together with the participation of the meninges, probably accounts for the severe pain which is often experienced in the early stages. When the medulla is involved the changes are of the same nature as those seen in the anterior cornual cells of the cord, but of less intensity. Actual destruction of medullary nuclear cells is not found, and if the individual survives, paralysis of the seventh, ninth, tenth and eleventh nerves or, and these are less often attacked, of the sixth and twelfth nerves, is much more often transitory than permanent.

EPIDEMIOLOGY

The disease is widely spread in the European, American and Australian continents. It is prone to appear year by year in the late summer and autumn in the form of small outbreaks, occurring in the same neighbourhood, but with scanty evidence of actual contact between the different cases. That it tends to affect isolated and remote communities in this way rather than the populous and crowded towns suggests that town-dwellers have acquired a higher average of immunity to the disease by constant exposure and minimal inoculation of the virus from carriers or by having contracted the disease in its abortive form. Poliomyelitis is, in fact, a disease against which an immunity is possessed by all except an unfortunate few. In all epidemics, whether small or large, the proportion of cases is rarely higher than one per thousand of the population. Even in the devastating epidemic of 1916 in New York and its vicinity, which Flexner so completely studied and recorded, there were only 1.59 per thousand affected in New York City and 2.4 in rural districts, although there were almost 9,000 cases and the death-rate, 26.9 per cent., was higher than in any other great epidemic. In a certain small area in Liverpool a limited epidemic was followed three years later by a renewed outbreak of the disease in the same area. It was noticeable that in this second epidemic all the cases occurred in young children born since the conclusion of the first epidemic, a circumstance which may be taken to mean that the first epidemic, small as its total was in proportion to the population of the area, had nevertheless exhausted all the available susceptible material. Because of this widespread immunity and because, in consequence, the disease is likely to involve one child only from among a very large number, it is quite rare, even in the greater epidemics, to find more than one case in a family. In a boarding-school of six hundred boys, on this showing, it would be unusual to find more than one or two susceptibles, and in practice it is unusual, though by no means unknown, for a first case to be followed by others in a school community. In the acute stage, cases have often been admitted to the wards of hospitals and cross-infection has not been found to occur. The difficulty is that we have at present no simple or practical means of testing for and certifying the presence of this immunity in any one case, and that the number of susceptibles among the child population varies from time to time and from place to place. We know that the immunity rate is very high, but we cannot give the absolute assurance which the anxious parent demands. At At the present time there is apparent a definite tendency for the disease to attack children at an older age than was formerly the rule. In New York in 1907 86 per cent. of all the cases were under five years of age, in 1916 77.9 per cent., in 1931 52.3 per cent., and in 1935 32.8 per cent. In the same period the percentage between the ages of 10 and 19 years, the age of boarding-schools, has risen from 2.6 per cent. to 21.6 per cent. The shifting of the incidence is important because a fatal ending is somewhat common in children about and over the age of puberty than at an earlier age.

Immunity can only be tested for by determining the power of the individual's serum to neutralise the virus and for such a test at least one monkey would be required. An attack confers lasting immunity, although Still has been able to collect from his own practice several undoubted instances of second attacks. Relapses within two months, while the disease is active, are less unusual. It is said that a passive immunity of some weeks' duration can be obtained from the injection of 10 c.c. of convalescent serum or 20 c.c. of pooled adult serum. It is difficult to understand, however, how such benefit can follow the use of convalescent serum in a disease in which the virus is absent from the blood and in which it has been shown that even a high concentration of anti-bodies in the blood cannot protect from even a small dose of the virus. Workers are at present endeavouring to find a method of conferring an active immunity by injections of attenuated virus from the spinal cord of infected monkeys. Flexner has recently expressed his disbelief in the possibility of such attempts to retain the immunising properties of the virus in attenuation, and at the same time to deprive it of its paralysing properties. There is a similar sharp difference of opinion with regard to the therapeutic use of convalescent or pooled adult serum. In no disease, due to a filtrable virus, has a convalescent serum proved effective after the onset of symptoms in the central nervous system. Numerous comparisons between large series of cases treated with serum and controls not so treated have failed to show any significant difference. The administration of any serum intrathecally in poliomyelitis is apt to be followed by an increase in the symptoms of meningeal irritation already present. The serum, if it is to be of any service, must be given in the pre-paralytic stage, at a time when the diagnosis is usually obscure, and a stage which in a large number of cases is not followed by any paralysis at all. Specific therapy is, therefore, at the present time of doubtful service whether it is used in prophylaxis or in the treatment of the established disease. The problem which has to be solved is not to raise the total of anti-bodies in the blood or cerebro-spinal fluid, but to deminish the intense susceptibility of the nervous tissue to a neuro-trophic virus.

The mortality in epidemics is generally higher than that of sporadic cases, and is usually perhaps in the neighbourhood of 10 to 15 per cent. Respiratory paralysis is the most common cause of death in the early days of the illness, probably from failure of the respiratory centre, and when death is deferred to the second week or later, pneumonia and atelectasis are the common causes. The Drinker apparatus has undoubtedly saved life in many cases of respiratory paralysis which would otherwise have died. The prognosis in poliomyelitis is in all cases difficult. Pre-paralytic symptoms may be very severe and yet no paralysis follow. Without pre-paralytic symptoms in any way significant, paralysis may occur within twelve hours of the onset and spread rapidly to a fatal termination. No prognostic indications can be gathered from an examination of the cerebro-spinal fluid. Mild cases may show many cells, or a high protein percentage, while in severe cases the changes may be minimal. After puberty a fatal result seems rather more frequent than in young children.

CLINICAL TYPES OF POLIOMYELITIS

Three types of reaction to the virus are met with clinically: the abortive type, the meningeal type (which may also be the pre-paralytic stage of the paralytic type), and the paralytic type.

The Abortive Type

In all epidemics of poliomyelitis a large number of children will be found to sicken with headache, fever, and vomiting, who recover after a day or two. These symptoms may be identical with those which precede paralysis in other cases and yet are followed by no paralysis. The spinal fluid in this type of case is quite normal. The frequency with which this type of case occurs during epidemics of poliomyelitis suggests that it may be in great part responsible for the immunisation of so many of the child population. If this is true, we have to deal with a disorder at times sporadic and at times epidemic, the identification of which is impossible because of the absence of any pathognomonic symptoms such as a specific rash. Only in cases which are accompanied by others with paralytic symptoms can their nature be recognised. On this showing, the illness cannot properly be termed an abortive illness. It is an illness which has as a common complication the involvement of the spinal cord. The original illness would bear to the nervous lesion the same relationship that the diphtheritic sore throat does to the subsequent peripheral neuritis.

The Meningitic Type

The meningitic type, which may also be the pre-paralytic stage of the paralytic type, is ushered in with drowsiness, irritability, with pain often intense in the back and legs, with headache and cramp-like pains in the abdomen. Hyperæsthesia is common and even light pressure, expecially over the spine, may cause great pain. The pulse rate is rapid, sweating often profuse. The skin may be mottled, and some degree of *tache cérébrale* may be found. It is in these cases that the so-called neck sign is usually to be demonstrated. To sit up and to bend forward and kiss the fully-flexed knees is impossible for the child. He tends if forced to sit up to support himself on his arms, holding the trunk stiffly inclined backwards. It is especially flexion of the neck on the thoracic spine which is resisted rather than, as in tuberculous meningitis, flexion of the head on the neck. The patellar and other reflexes are exaggerated and may be unequal, whereas in meningitis they are equal. The spinal fluid in this stage is under pressure and shows an increase of cells, generally mononuclear, and of protein. Sugar shows no reduction, a point of distinction from meningitis. The Lange colloidal gold test gives as a rule a characteristic curve differing from that of the normal and from that of the tubercular meningitis.

Although in this type there is thus abundant evidence of meningeal irritation, there is no paralysis. In a proportion of cases recovery takes place without paralysis, in others, after two or three days, rarely after so long an interval as a week, paralysis follows. It is not possible to offer any opinion as to whether an individual case will or will not proceed to paralysis. Neither the clinical findings nor a study of the cerebro-spinal fluid offers any evidence on which such a prediction can be based.

The Paralytic Type

Since the abortive type of case in general defies recognition and the meningeal type either recovers or passes rapidly into the paralytic type, it follows that in hospital practice cases of poliomyelitis are apt to present themselves after, rather than before, the development of paralysis. As a rule, before paralysis, there has been a day or two of definite illness, but the meningeal symptoms are not as a rule prominent or lasting, although they may be both. Especially in sporadic cases, the paralysis may present with a minimum of previous illness. Paralysis usually is at its height within a few hours of its onset and thereafter retrogresses. Considerable return of power may be apparent within a fortnight. Exceptionally the paralysis may slowly extend and ultimately reach the medulla; such cases were unusually common in the outbreak of 1938.

Besides the common flaccid paralysis of one or more limbs and the less common extension to the medulla, a case may occasionally be found in which the cerebrum has borne the brunt of the attack and, following a stormy illness, marked by convulsions and coma, a spastic type of paralysis has resulted. In the absence of a simultaneous lesion of the cord and in times when there is no epidemic, the diagnosis of polioencephalitis must always be a matter of conjecture. Even rarer are the cases of cerebellar involvement marked by ataxia.

TREATMENT

Although there has been of recent years a great advance in our knowledge of the nature of the disease, and a clearer appreciation of the problems which have to be faced in prophylaxis and treatment, we have as yet no specific therapy. The use of nasal antiseptics is advised against on the ground that the mucous membranes of the nose have been shown to contain immune bodies and that the natural protective mechanism may be lessened by antiseptic irritation. Lumbar puncture is of service in relieving the high pressure in the cerebro-spinal fluid and the symptoms of meningeal irritation. In bulbar cases its use may have ill effects, and in cases with established paralysis, it is without effect. Rest and the support of paralysed muscles in the position of relaxation so as to free them from the effects of contraction of their antagonistic group, remain the chief means of treatment. Of late years there has been some reaction against a too-prolonged splinting and immobilisation. When pain and tenderness have completely subsided, which usually takes place after two to five weeks, graded exercises, often best carried out with the limb immersed in water, and massage are valuable aids to recovery.

Obituary

MAJOR G. A. LINTOTT, M.D., M.R.C.P.

THE death of Major G. A. Lintott, whilst serving in Egypt, has come as a sad blow to his many friends and students. His academic career was brilliant throughout, leading to qualification in 1931, M.R.C.P. in 1934 and M.D. (Lond.) in 1936. Many will remember his critical examination and report on the routine of water divining carried out in the Physiological Department. It has never been equalled. His election to the staff of Guy's was a foregone conclusion, and he lost no time in broadening his already extensive knowledge by travel abroad. Having first mastered the technique of gastroscopy under the tutelage of Henning in Germany, he subsequently visited many clinics in the U.S.A. and returned to us full of his customary enthusiasm and imbued with much valuable fresh knowledge. He had already established his reputation as a sound clinician and most able teacher when the war put an end to connected work. He remained at Guy's in the E.M.S. as physician in charge of the medical unit. During that time he attracted an ever-increasing number of students and post-graduates to his inspiring teaching rounds. Feeling that during those busy months he was still not putting out enough effort, he decided to enter the army and was posted as Major in the R.A.M.C. The news of his falling a victim to dysentery was soon followed by gloomy bulletins, but early in December he appeared to have overcome the infection which struck him down. This only added to our despair on learning, shortly before Christmas Day, of his untimely death.

We who have known him as a friend and colleague will remember him not just as an able physician, but also as a man whose successes never marred his generous nature, neither did they deprive him of his great sense of humour. Our heartfelt sympathy goes out to his parents and brother who have been so sadly stricken.

A. H. D.

Sector Matron's Letter

A HAPPY CHRISTMAS ! Does that sound a mockery ? No—for the human heart is resilient and the human spirit indestible, thank God !

This has been a queer year : great deeds and little deeds, high endeavour and humdrum routine. During the winter and spring all the Guy's Units gave entertainments which showed remarkable talent, the most noted being "The Starlings' Revue," with a cast of Sisters, Nurses and Guy's men of all ranks. They gave regular fortnightly performances at Guy's for weeks, and often reached a high level ; occasionally they plumbed a depth instead—but not often. Farnborough—all ranks—also ran a good variety show. At Orpington, Massage Students put on a clever, ludicrous pantomime, and all staffs gave some good variety concerts. Hockey matches are a great feature at Orpington, all grades playing—old men and maidens—and if the rules are elastic the goodwill is unvarying, and afterwards the First Aid Post likes to have something to do. Tennis, too, had a good season, although there were few matches. Mrs. Harold Chapple at Pembury was untiring and very successful in her endeavour to get the offer of private courts on which our Nurses and men could play.

Then came Dunkirk. We all must have our own special memories of that terrible and wonderful time. On May 29th I returned to Boundary House after tea to find Mr. Hedley Atkins closeted with the Group Officer, Professor Johnston, and asking for immediate help, Nurses and Doctors, for a small Public Assistance Hospital at Dover, which was receiving the worst cases from the boats, those too ill to travel further. There had been 18 deaths in one ward one night. By 7 p.m. we were off on the Dover Road, Mr. Atkins in one car with a House Officer, extra instruments and a Theatre Nurse, I in my car with the Liaison Matron, Miss Campbell, and three Nurses and their light luggage. A lovely night—clear and still. After Canterbury we had difficulty in getting petrol, which was all earmarked for the Army. Just outside Dover the other car had a puncture, near a fried fish shop, so, sitting on the curb, we fed the Nurses on fish and chips, fresh and steaming hot in newspaper wrappings, in order that they should arrive having had supper and ready for duty. Soon after 9.30 p.m. they were at work. I shall not easily forget those tragic wards of desperately ill men, the rows and rows of blanket-shrouded bodies in a hall below, the untiring night and day labour of a few trained people, and the gallant help given by raw V.A.Ds. and C.N.Rs., who stifled their feelings, used their common-sense to fill out the gaps in their knowledge and worked unsparingly. Nor shall I forget the capable, selfless and untiring Matron, who organised the Hospital work quietly night and day, against such tremendous odds.

Before returning, Miss Campbell and I drove down to the shore, on the way getting petrol from an undertaker through the Matron's recommendation. After the inky black streets it was peaceful to draw up by the harbour, to see lights shining on the calm water and to hear the faint lap of ripples against the stone wall. Outside, masthead lights moved and a ship whimpered asking to come in. There were no air raid warnings—no bombs or guns. The harbour was packed with little boats of all sizes and shapes; seeing them riding so quietly at their moorings it was hard to believe that they had recently come through Hell, their decks a shambles, and that to-morrow they would do the same again. The town was full of seamen of all types, walking and talking in hushed voices. Two very young bluejackets rolled across the road, arm in arm, one talking about bombs; the other nudged him, " Now, matey, don't forget we're the Silent Service." And then, in perfectly tuned parts, they began to sing " Silent Night, Holy Night," as they rolled a little unsteadily up the road.

Then came a period of comparative quiet. The Dunkirk wounded were being nursed, the lists of Dunkirk prisoners and prisoners from the French retreat were published periodically. Hopes were raised—hearts were thankful, hearts were broken. At the bases, the Nurses worked hard, studied hard, took examinations and roamed the Kent country. The Sisters at each base gave some delightful evening picnics. The lovely summer drew on to autumn.

And then came the Blitzkrieg. Out of the blue, Hitler launched his frightfulness on London—and on coastal and inland towns north, south, east and even west. On September 7th his bombers got through up the Thames Estuary, and as I drove from Orpington that evening I saw fires stretching from Woolwich to London Bridge. There cannot have been, in England, so great a sight since the Great Fire of 1666. Since then many parts of London have been wrecked: famous public buildings, beautiful churches, big properties, little housing estates, new houses, slum houses, railways (but not so many), bridges (only a few), but the spirit of the people—Never! At first they felt helpless and stunned as they heard the evil humming-birds draw nearer and circle round with only a feeble gun or two to oppose them. And then our little father Winston moved — London *should* be defended. The roar of the guns on the first night of the big barrage will never be forgotten by those who heard it; out of the night it came—unexpected, thundering, deafening. For one moment the people faltered. What could this be? Then joy and exultation. *Our* guns—the big fellows roaring, the little fellows barking, the Bren guns and machine guns chattering. But keep under cover! Look out for shell fragments falling! The sky was full of them, and in the morning boxfuls of sharp weighty bits of metal could be swept up.

On September 15th, Guy's was bombed: at about 9.30 p.m., out of the night, came four lightning crashes. The first struck the road in Maze Pond at the foot of the central tower of the Medical Block, dived inwards under the tower, and exploded among the steam pipes down below. The second dropped neatly through the glass roof over the central staircase, hit the big stone steps and exploded outside Miriam and the new Children's Ward (old Victoria and Bright), both empty. The explosion brought down the staircase, flight by flight, in an ever-increasing cascade of stone steps, concrete and the big stone flags of the different landings. Both lifts also were wrecked. No one was hurst except one Doctor working in a laboratory on the top floor, who had a cut head and concussion. Night Sister had just walked off the landing into Mary; her progress was accelerated. Heavy doors were blown off, window glass fell, everything movable in the wards moved—but, thank God, the patients and Nurses escaped. A.R.P. workers, firemen, helpers of all sorts arrived like magic—even alcoholic gentlemen from the Boro' rushed in—" We must 'elp the 'orspital. Tell me wot I can do, Sister? "—and in twenty minutes every patient had been got out, carried down the two fire staircases to the Eye Wards or to the Out-Patient Hall. Later they were sorted out and many of them housed on mattresses on the floor of the new Pathological Block behind the Medical School.

Meanwhile a whisper went round—two more bombs in the Works Yard beside Tabard House and the Laundry, and one of them has not exploded. The Nurses were moved from the back part of the Home and the maids were evacuated from Tabard House—their basement dormitory had inches of water in it and all the windows were gone. They curled up, each with a blanket, in the basement of the new Nuffield Nurses' Home where the old Squash Courts used to stand. For a time no gas, no light, no water—and then our splendid Works Department staff got to work and emergency services were rigged up. In the small hours of morning, while we were fixing up oil stoves and ways and means of cooking and serving breakfast for everybody in the basement of the Pathological Department, I met one of the little old stokers—grey in the service of Guy's—coming to get a drop of milk for his tea.

"We've got a funny job here, Matron," he said, "with that bomb not gone off; but we'll stick it," and back he went down to the engine-room, with the unexploded bomb only about 30 yards away. Courage—the quiet, cold sort—and duty, that shining word—which is sometimes a little irksome to the young, but later becomes their guiding star. The bomb had already exploded underground, but nobody knew that for several days.

Now we are nearly straight again—debris cleared away, a wooden staircase built to the first floor in the Medical Block, and the two wards, Addison and Victoria, about to be re-opened.

Time goes on, and it is winter. We haven't mastered night bombing yet, and many of our lovely old cities have suffered; but we have made daylight bombing too expensive for the enemy, and against all his ports, from North Cape to the Mediterranean and on many of his industrial towns and undertakings far into Germany itself, the R.A.F. has developed a telling offensive.

Little Greece is living again the days of her former greatness, and has pushed the Italians off Greek soil into Albania. The submarine menace has increased. The economic situation is difficult; but our Dominions throng round us; we have more friends than we had a year ago; we are better organised than we were a year ago. And in the hearts of all the people—the little people of England who *are* England—there is a calm confidence and a quiet will to endure till the victory, which is certain, comes.

Do you remember the words of Paul in his letter to Timothy:—

> "I know whom I have believed, and am persuaded that he is able to keep that which I have committed unto him against that day."

This is freedom and a clean heart.

Good-night—in my vaulted basement bedroom, where once they used to clean the boots, the coal-cellar door leading on to the Chapel Crypt just by my head—I listen to the hum of the enemy planes, the occasional whine of bombs and the roar of our guns, and I wish Thomas Guy could see his old Hospital; he would be proud of it, and of you—its daughters—playing your part all over the world.

A Happy Christmas to you and God keep you.

We are pleased to publish extracts of this letter by the Sector Matron to the members of Guy's Hospital Nursing League.—EDITOR.

Sector News

Guy's Letter

THE memory of this year's Christmas has been obscured by clouds. To have said that it was enjoyed everywhere at Guy's is to have said all.

The news of Dr. Lintott's tragic death on active service came as a great shock, though we had heard of his serious illness. To many, to scores of us who passed through his Pre-Clinical Class, he was our first contact with clinical medicine; he gave us our first taste of the wards for which we had looked ahead in the dreary hours of dissecting. And that is how and why we shall remember him.

Often we had wondered at the Apostles' feelings when the cloven tongues of fire lighted upon their heads. But if now we and the Ministry of Information both knew at the same time we should not be allowed to tell. It is to be hoped that those who thought the College a malignant growth will have a chance to ponder the results of excision by diathermy.

R. T. H.

Pembury Letter

THE festive season at Pembury opened with the return of the Residents covered in new degrees and their "ratting suits." There were a few preliminary canters at the local hostelries, and then the big Christmas Handicap was "off." The Guy's wards gave delightful parties, open to nearly all. These were staggered only in the chronological sense—children, E.2, F.1, F.2, on successive days from the 25th.

On Christmas Day there was a fancy dress dance, at which the forté was certainly "The Blackbirds of 1940." The following evening the Residents gave a most enjoyable party, "Staggered" in the other sense of the word! We were delighted to welcome our late peripatetic surgeon, and his rendering of the "Bluebottle" on two lampshades will long be remembered by all. Messrs. Horan and Lane Roberts executed "Waltzing Matilda, the Tattooed French Lady," and other supra-umbilical songs with great verve, and finally the evening was brought to a close with such gentle sport as pillow fighting and old-fashioned fisticuffs.

To bring this round of gaiety to a close, Miss Wheeler gave us a bumper New Year's Eve dance. To music—sometimes symphonic, sometimes cacophonous, but always adequate—we danced out 1940. Then with due ceremony, including a fairy, we welcomed 1941. After a further spell of dancing all departed to face the tasks, the hopes and the fears of the New Year.

Yea verily and in truth, a good time was had by all.

N. M. J.

Orpington Letter

THE Hospital seems quiet now, for we had a cheerful Christmas in spite of our present strange existence.

Wards were well decorated, carols echoed through the corridors, and tea parties were held where patients, nurses and doctors joined each other with great hilarity. The patients certainly appreciated their Christmas, a good reward for the nursing staff who gave them so much of their time. The nurses also surprised us with an amusing Concert and Dance led by an R.A.F. Band. We hope that they enjoyed it. It seemed so. Some say that the rite of the mistletoe was revived, but we hesitate to believe that a custom so contrary to public hygiene should have taken place.

Celebrations in the Mess had a definite epicurean touch about them. Dish after dish of delicious "flesh" was served up, the furkins flowed, and a series of Dances was held. Our new room made all the difference, for it is of goodly size and is a great addition to our comfort.

At this time we make no excuse for glancing at our Diary of the past year. There is a feeling of pioneer work in building up an efficient emergency hospital and progress has been satisfactory. We think of the early days of waiting when the dart was often thrown and Housemen longed for work. Then, convoys from France, and the rush of cases from Dunkirk, with the new surgical problems that they presented. The daylight raids next began, and following an exciting air battle above us, we would take in a pilot or two—fine fellows, startling in their coolness and modest about their exploits. It was at this time that we had our baptism of fire, a chaos of noise, during which our boilerhouse was hit and left a steaming wreck, and Housemen showed their skill as firemen. Finally, the night raiders, with their attack upon the family itself. Old men and children, pathetic in their innocence, which is magnified by the halo of tragedy that so often surrounds them. It is a privilege to treat these people.

Thus, another chapter ends, and we welcome the New Year with confidence, sending greetings to out Sector Hospitals and to all those who have passed through the wards at Orpington.

C. F. H.

Farnborough Letter

THOUGH we have now passed sfaely through the Gate of the Year into 1941, we are yet haunted by the memory of a Christmas passed. We must confess to having approached Yuletide 1940 rather in the manner of Scrooge before his reformation: the blitz, rationing and the fact that we were evacuees had combined to produce a kind of stoical resignation, and, although there was a noticeable warming of the atmosphere as the holiday approached, we felt little real inclination for levity or merrymaking. However, there were fortunately some Cratchetts among us. When we learned that some of the staff of "F" hut had taken a leaf out of the book of Little Tommy Tucker, and had determined to earn a turkey by carol singing—still more when we actually heard their melodious strains wafted through the darkness and rising above the distant rumble of the guns—we clearly felt something of the Wenceslas spirit of bonhomie kindling within ourselves. Soon came the news that the carollers had gained their objective, and the festive programme, once started, grew and expanded like the proverbial snowball. Despite the absence from the ward doors of any ornamental lists for signatures, and the absence from the tables of any of the collecting boxes which one associates with the month of December at Guy's, invitations were circulated for tea parties in Mary and Elizabeth and supper in "H" hut on Christmas Eve, and the rumour spread that Bromley as well as "F" had got a turkey for consumption on Christmas Day. The tea parties acted as excellent house warmers, the one in Elizabeth (the Children's Ward) being attended by no less a person than Santa Claus himself.

During the course of supper in "H," while community crooning was proceeding to the accompaniment of Dr. Rawlings' accordion, it was whispered that the irrepressible Sister Titley had secured a turkey for them also. In the meantime "L" and "M" had been making their arrangements and so it came about that on Christmas Day in all the Guy's huts, Christmas dinner was eaten in the traditional style, with all the nurses, medical staff, students and ambulant patients seated at a long table down the centre of the ward. Personally, we enjoyed some excellent turkey in Bromley where Sister Perkins was presiding over a distinguished company, including Professor and Mrs. Payling Wright. We followed this with some equally fine plum pudding in "H" and then arrived in "E" just in time to hear Mr. Spalding make a speech and to see Mr. Gilford literally go up in smoke, his paper hat having somehow caught fire. Dr. Navasquez was standing near with a very long cigarette-holder in his hand and a mischievous twinkle in his eye.

After dinner, the visitors arrived and were given tea in the wards; meanwhile there was a foregathering in Hoggers House (where the Residents live) and plans were being formulated for prolonging the revels as long as possible. There was scarcely time to finish the lordly cigars produced by Mr. Rochford before it was time to repair to Bromley for tea. A sherry party had been announced for six o'clock, but the details of this remained somewhat of a mystery up to the last minute as Dr. Forman, who was giving the party, had the previous day been reported a victim of 'flu; however, he fortunately recovered in time to discharge very successfully the duties of host, both at the party and subsequently at supper, when some of the Sisters and students were entertained in the Consultants' Mess. Dr. Forman declared afterwards that his health was greatly improved, and this confirmed a belief which we have long held in the value of fluids. After supper informal gatherings were held in various places. We went to "F" hut and, having found a square foot of the floor unoccupied in Sister Marston's room, we settled down to pick turkey bones and play a libellous game called "Consequences," in which great inventive talent was displayed. And so to bed, but not to sleep, until we had dealt with the humorous individual who kept ringing us up in our borrowed lair and apologising for getting the wrong number. On Boxing Day some people actually devoted the morning to seeing patients, but the afternoon was reserved for a party at Bassetts (a nearby school which has been taken over as an annexe to the Nurses' Home), and where fun, games and food were provided for all from three till seven. The evening was given over to the observance of a local custom, viz., the Wardmaids' Dinner and Dance, when the Matron and Residents sit down with the maids and the waiting is done by the Sisters. We understand that Dr. Moore greatly distinguished himself at this democratic function. On Friday evening the Night Nurses' Dinner and Dance was held; Mr. Trethowan led the band on this occasion. The Day Nurses had their Dance (also preceded by a dinner) on Monday, and this time the band was provided by the local R.A.F., who played with great gusto; a number of their colleagues were gyrating round the floor with equal gusto, and we also noticed the Matron and the Medical Superintendent treading a stately measure. This Dance was a great success and went on until 12.30 a.m. Dr. Wakeham (who was in his most winsome mood) prevailed upon both the Matron and the band to agree to an extension.

Thus ended the Christmas festivities at Farnborough, and thus shall end their chronicle. If it should be read by Lord Woolton we can only crave his indulgence and remind him that—

"The moving finger writes; and having writ,
Moves on . . . .

V. C.

Guy's Hospital Gazette
(Established 1872)

A Journal of Hospital News, Medicine, Surgery and Dentistry

Editorial and Publishing Office—The Counting House, Guy's Hospital, London, S.E.1.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Correspondence

The Four-Tailed Bandage

To the Editor of the GAZETTE

SIR,—In my first lecture on Injuries of the Face, published in the *Gazette* of Oct. 19th, 1940, I pointed out that the four-tailed bandage should not be used in the first-aid treatment of fractures of the jaws, since it tends to pull the point of the chin backwards. This will increase the deformity and may produce considerable respiratory embarrassment. In the report of the Army Advisory Committee on Maxillo-Facial Injuries published by the War Office it is stated categorically that the four-tailed bandage should *not* be used.

It is therefore distressing to read in Mr. Doubleday's lecture, published in the *Gazette* on December 14th, that this bandage is once more recommended. Mr. Doubleday points out that it requires brains to apply such a bandage, and adds a whole paragraph on the technique whereby it can be applied in a proper manner. The very fact that it requires such an elaborate technique indicates that there are pitfalls for the unwary. First-aid treatment of fractured jaws must be in the hands of junior medical officers and their orderlies in the front line, and it is doubtful if such people will have given to the subject that degree of thought and study that Mr. Doubleday recommends.

It is even more distressing to read in the most recent book on Fractures that "it is customary to ask the dentist to fix the fragments by wiring the teeth of the two jaws together, but good results can be obtained by the use of the four-tailed bandage." There follows a diagram in which the ends passing beneath the occiput are tied first, and the whole impression of the picture is that an attempt is being made to pull the jaw backwards, the very thing that one must avoid at all costs.

While there is so much loose thinking about fractures of the jaw, it would be better for those with considerable experience to agree, and to recommend no bandage at all, or one that will be as near as possible foolproof in inexpert hands. A simple vertical sling, placed well back under the angle of the jaw, or the barrel bandage, described by Mr. Kelsey Fry, do not carry this danger. The latter is applied by making a vertical sling, tying with a half-hitch on the vertex of the skull, then loosening the two halves of the knot and allowing them to slide to a horizontal position round the forehead and occiput, and tying to take up slack.

Yours, etc.,

N. L. ECKHOFF.

Guy's Hospital, S.E.1.

Reviews

Clinical Methods. By HUTCHINSON and HUNTER.

THE fact that this book has reached the eleventh edition is sufficient testimony of its value. During the first three months in the pre-clinical class it should help to emphasise the most important lesson of a thorough and routine clinical examination, a lesson which could be wisely revised before taking the final or higher medical examinations.

The method of examining each system of the body is preceded by a concise account of the medical anatomy, and there is a wealth of clinical points which are not easily obtained elsewhere. The substance cannot be absorbed at a single reading, and it would well repay the student to have this book at hand during his appointments as Medical Ward Clerk. In addition, the details of simple laboratory investigations are useful for reference, and the importance of examining the vomit and fæces as well as the urine is emphasised. Unfortunately such an important technique as blood grouping is given in sufficient detail to suggest to the student that he is able to do it, but actually in insufficient detail to make the procedure a safe one. The newly agreed and more rational nomenclature, founded on the presence or absence of the agglutinogens A and B, is put in parenthesis, but should be given a more prominent place. However, this is a minor criticism in view of the overwhelming assets of a book which can be thoroughly recommended.

E. B. F.

Sport

Guy's v. Wasps

(*At Honor Oak Park on Saturday, December 16th*)

THIS was a game of two halves. The first when Guy's played like a team possessed, against a strong wind and a much heavier pack, getting the ball from most of the scrums, some lightning movements in which the halves and three-quarters combined beautifully, resulting in some excellent finishing.

Nobody would have recognised the Guy's side in the second half for they went to pieces completely. No doubt they played as well as they were allowed. The Wasps forwards dominated the second half; they had the ball from nearly every scrum and were much superior in the loose scrums, forward rushes and line-outs.

This much can be said of Guy's: they always looked far more dangerous behind the scrum than their opponents, but the chances in the second half were very few.

Guy's did not have to wait long for the lead. A beautiful movement with the halves and three-quarters handling and passing perfectly ended in Forster running through and round to the posts for Kynaston to convert.

The Wasps exerted much pressure during some even play, and a determined rush by their forwards led to a scrum near the Guy's line, from which Smith crossed for an unconverted try. Towards half-time Guy's increased their lead through Forster, who took a nice pass from Charlton after the latter had broken clean through. Kynaston just failed with a difficult kick.

Following the change of ends, one expected Guy's to pile up the points; they had the wind and a useful lead in their favour. The Wasps, however, thought differently; their forwards, with plenty of vigorous determined forward rushes, took control.

Guy's had one bright spot in the second half and this led to a try. The ball was handled beautifully by the three-quarters until it reached Gartrell, who dashed along the line, and on facing the full back passed inside for Kynaston to cut across and to place the ball under the posts. No charge was given, but Kynaston sliced his kick.

For the rest of the game, the Wasps were continuously on the attack, and in rapid succession a penalty goal was scored by Compton, two tries by Edney and a try by Compton, none of which were converted, leaving the Wasps the winners by a margin of four points.

Score: Guy's, 1 goal and 2 tries (11 points); The Wasps, 4 tries and a penalty goal (15 points).

Team.—T. L. T. Lewis; R. J. Forster, D. W. F. Charlton, R. U. F. Kynaston, P. C. Gartrell; D. M. Strathie, N. I. Scott: J. P. Rochford, R. M. Sharpe, J. D. Everall, A. G. Albers, C. Vidot, T. W. Renton, D. N. Fuller, G. M. Evans.

Guy's Hospital Netball Club

FOR the inaugural match of the Netball Club the weather dawned cloudy and damp, and one wondered whether the ladies would be of sufficient courage to take the field in the afternoon. By mid-day, however, the sun was shining and at 3.30, zero hour, there was sparkling sunshine and the atmosphere was pregnant with the oncoming contest. First to arrive were the students clad in rugger jerseys and socks contrasting with gay variegation of the ladies' team.

The first bounce was necessarily delayed for a short explanation of the rules to the men, but as soon as a rough idea of these had been grasped, the whistle was sounded amid enthralling excitement.

Netball is considered by some to be effeminate, but none who watched this game could describe it as lacking in speed, stamina, strength and skill. Play moved from one end of the pitch to the other with astonishing speed, and the gyrations and grace of the girls was matched only by the roughness and ruthlessness of the boys. In the earlier part of the first half the play was confined to the students' goal, where Miss Turnbull and Sister Brown, with extreme accuracy, scored on every possible occasion. As the game progressed, however, it was evident that no walk-over was forthcoming, and by the middle of the second half, the students were having many more good shots than their opponents. One minute before time the score was 14—10 to the ladies, but the students' morale was high and three quick goals were scored before the final whistle was blown. Outstanding for the ladies were Miss Turnbull, Sister Brown, S. N. Wilson and Sister Imray, while Finnegan, Joyce, Manning and Sharpe showed promise for the future. The referee, S. N. Williams, was universally voted first-class, and general satisfaction at the game was expressed over a welcome tea.

At a later date a second match was played, which strangely enough ended in another win by one goal to the ladies. Certain murmurings among the students rendered dubious the official score of 12—11.

This game was much more spirited and certainly more vigorous than the first, and the injuries were somewhat more severe, fortunately with no loss to limb or life. Once again the shooting of Miss Turnbull and Sister Brown was so damagingly accurate as to turn the tide against the students, who as before had more chances. The defending of Finnegan, the shooting of Joyce and the solidarity of Chase compensated for the ubiquity of S. N. Wilson and Sister Imray, and at half-time the students led 8—5. A great rally by the ladies pulled them through, however, and they finally won by their one goal. Again the referee was generally approved, and the thankless task was this time ably performed by S. N. Tadman.

We understand that more matches are to be played in the not too distant future, including some between the Day and Night Staffs, and qualified and unqualified men. We look forward to these with anticipation tempered by sober apprehension.

Hospital Information, etc.

Errata

SOME SKIN DISEASES COMMON IN WAR TIME

P. 371, at bottom of column.—*Treatment*.—N.C.I. powder, Crude naphthalene 96 per cent., creosote 2 per cent., iodoform 2 per cent.

P. 372.—Treatment of epidermophytosis :—Liq. aluminium acetate drs. 1, lotio calaminæ oz. 1.

Pass List

SOCIETY OF APOTHECARIES OF LONDON FINAL EXAMINATION

November, 1940

Medicine

*R. West

Forensic Medicine

*R. West

* Has completed the examination

FINAL EXAMINATION

October, 1940

Midwifery

C. N. d'E. Eastes

UNIVERSITY OF LONDON SECOND EXAMINATION FOR MEDICAL DEGREES

December, 1940

P. Brightwell
D. E. M. Brown
R. R. Burn
C. H. Dave
A. G. Ellerker
R. Finney
G. W. Garland
A. Hargreaves
H. F. Hills
P. G. Large
A. B. Lee
J. K. Morgan
W. H. Smith
J. R. Trounce
J. C. P. Weber
E. G. Wright

The following Students have now completed the examination under the old regulations by passing in Pharmacology :—

T. W. Renton
F. H. Staines
R. Wadia

Papers by Guy's Men

Barber, Hugh, and Another. Blindness following Hæmatemesis. *Lancet*, 1940, ii, 715.

Bensted, Lieut.-Colonel H. J. Immunisation against Bacterial Infections. *Ibid.*, 755.

Bensted, Colonel H. J. Immunisation against bacterial toxins. *Ibid.*, 788.

Eckhoff, N. L., and Another. Chemotherapy of Abdominal Actinomycosis. *Ibid.*, 707.

Goodhart, G. N. A Plea for the De-specialising of Pathology. *Ibid.*, 737.

Macintosh, R. R. New Use for the Both Respirator. *Ibid.*, 745.

Simpson, Keith. Shelter Deaths from Pulmonary Embolism. *Ibid.*, 744.

Worster-Drought, C., and Others. A Form of Familial Presenile Dementia with Spastic Paralysis. *Brain*, 1940, **63**, 237.

Changes of Address

Mr. F. Bocquet Bull, having given up his consulting room at 69, Wimpole Street, will conduct his private practice from Nuffield House, Guy's Hospital, London, S.E.1 (Telephone HOP 1867), where appointments may be made by telephone or letter.

J. C. Robertson, Lieut. A.D. Corps, c/o Glyn, Mills & Co. (Holts Branch), Kirkland House, S.W.1.

Awards

NEW YEAR'S HONOUR, C.I.E.

Lieut-Colonel H. H. Elliot, M.B.E., M.C., Surgeon to His Excellency the Viceroy.

Mentioned in Despatches

In recognition of distinguished services in connection with operations in the field, March to June, 1940 :—

J. A. Brocklebank
P. E. Creswell

In recognition of distinguished services in connection with operations in Norway :—

Commands and Staff : Colonel G. A. Blake.
Royal Army Medical Corps : Lieut. A. E. Loden.

Prisoner of War

Lieut. Samuel Thomas Williamson, R.A.M.C.

Marriage

STEVENSON—DUKE.—On January 2nd, 1941, at Holy Trinity Church, Cambridge, Claude M. Stevenson, M.D. Cantab., to Johanna Duke, widow of the late W. H. Duke, Fellow of Jesus College.

Death

LINTOTT.—On December 23rd, 1940, in Egypt, Gordon Alan Macdona Lintott, Major R.A.M.C., Assistant Physician Guy's.

ROBERTSON.—On December 26th, 1940, at Wideford, 57, Palace Road, S.W.2, James Robertson, M.B. (London).

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *25th January 1941* *Number 1370*

PASSIM

ON the landing between the stairs to Addison and Victoria Wards a moderate-sized chip in the floor was being repaired by the Works Department; the defect had been cleverly filled with fresh cement using a wire mesh as a foundation. The usual wooden guard rail and red danger lamp completed the picture on that dark dreary and starless night of December 30th, 1940. The various population of the Hospital were scattered about in the different buildings; a gloomy few were dining in the " Spit ". The conversation, as usual, dragged on about the war and its more recent development. Outside, there seemed to be an excessive commotion which, on further inquiry, seemed to be due to a couple of " incendiaries " in Maze Pond just outside the Surgery. Somewhat weary of it all, and besides, incendiary bombs occupied a very low and harmless place in our sense of values, a few of us wandered along towards the scene of activity more to escape from our present surroundings than out of curiosity.

Hardly had we set foot outside when a shower of incendiary bombs rained down upon the whole district; the sudden transformation of our feelings need not be described. Snatching at sandbags, running with buckets of water, nurses, students and medical staff alike fought those glowing bombs, without thought of personal risk, yet full well knowing that such bombs in the past had frequently been of an explosive nature. While our efforts were for the most part successful, in the surrounding district neighbouring buildings were unattended. It is with mixed feelings that one watches a small fire less than a foot square gradualllly spread over the whole roof, ultimately to involve the entire premises. It was not long before Guy's was ringed by fire on all sides; those buildings which were not actually directly hit, caught fire within an hour or two, either by direct spread from an adjacent building or from burning cinders which filled the sky and rained down everywhere.

In some places in the Hospital electrical switches were melted by the heat and once contact was made electric lights began to shine in many curious places which were not blacked out. Although these had about as much effect as shining a torch at noon on a bright sunny day, so automatic had we become in the matter of regulations that it seemed that the emergency of the moment was to extinguish these lights, which many of us did, using all kinds of missiles from buckets to bricks.

Very early in the evening, we had the misfortune to be hit by two high-explosive bombs. The first scoring a direct hit on the surgical block, the second involving the bakery and neighbouring buildings. Parts of Evelyn and Naaman Wards no longer exist but owing to the type of construction and the foundation, the effects of the explosion were fairly limited. Dorcas Ward, which was filled with patients and nurses, was very badly shaken and with the electricity cut off, the atmosphere filled with dust and glass and the crash of falling masonry only a few feet away, it is easy to understand the slight confusion which resulted at first. However, when the " fire and fury " had cleared, there was really very little damage to the ward itself; before many minutes had passed the students appeared on the scene and using their own commonsense, not waiting for orders, began their arduous task of transporting the patients to safety. Fortunately, just such an emergency had been anticipated by the Hospital authorities; Addison and Victoria Wards were standing by fully equipped, with a full complement of nurses, with beds made up and warmed ready to receive these patients and even overflows of casualties from elsewhere.

Martha Ward, although not directly hit, suffered from the effects of blast which travelled along the underground passages, sweeping away heavy partitions under the nurses' home and massage building like matchwood. One ramification of this blast ended up under Martha Ward and blew up the floor and one outside wall; by a fortunate coincidence a piano happened to be standing directly over the underground passageway and its weight tended to neutralize the force of the blast. Even so, the piano was hurled into the air, landing several feet away upside down. Guy's seems to be a house of miracles, for again no one was hurt and the patients were evacuated without mishap.

By the time all these proceedings had been carried out, Guy's was surrounded by a blaze of fire which seriously rivalled Dante's blazing inferno. In the Colonnade alone, one was confronted with such a blast of smoke and heat coming from Down Bros.' building that it was impossible to descend into the front quadrangle. We extend our heartfelt sympathy to "Downs," who have always been such a great convenience to Guy's people. Another famous landmark and standby that is no more is the old "Ship and Shovel," but the time-honoured initialled table was saved from the fire and now resides in Guy's Hospital. Poor "Flossy of the Ship" who in better times helped Guy's men out of their depressions, took refuge with her small retinue in one of the diverticuli in the underground passage near the kitchen. Flossy will be missed by many, but we sincerely hope that her absence will not be for long.

"We have been, at one time or another, to the student quarters of all the voluntary hospitals, with the single exception of the Westminster Hospital, which, in any case, is being rebuilt, and we are therefore in a position to say with certainty that in our view there is none of them which can compare with the Guy's College in dinginess of aspect and dirtiness of maintenance, in its perpetual overcrowding and in the sense of repulsion which it is calculated to convey to the newcomer." Thus read the Passim of 1st of February, 1936.

All but one wing of the College has been gutted and even this wing has lost its roof. Whatever opinions about the adequacy of the College we might have held, to see the College so wantonly destroyed was indeed a tragic sight. With most of the students occupied in fighting the fire that had started in the roof of Hunt's House and others busy evacuating the patients into waiting ambulances, it was not possible to save a lot of their personal belongings or College furniture; nevertheless, most of the leather furniture was saved from the common room, the "milk can" was rescued from the "Spit", the fireman's helmet and ship were removed in time from the residents' room and all the panels were stripped from the walls of the externe room before they could be damaged.

The fire in Hunt's House has already been referred to, in fact, by the time this had got under way, Guy's was virtually cut off from the outside world by fire. It became necessary to evacuate all the patients as soon as possible, a task which was carried out with commendable smoothness, again with thanks to the tireless energy of the students. It was due to them that Hunt's House, in fact Guy's Hospital, still stands, a veritable miracle in a district of burning ruins. That they should have saved their Country so much and at the same time, in a few cases, suffered loss of personal property, seems unfair. Elsewhere in this issue appears a letter from the Deputy Superintendant appealing for funds to replenish to some extent the losses experienced by these people.

The rest of the history of that eventful evening concerns the splendid work done by the fire-fighting squads and the Works Department. Some of the fire parties arrived from some distance away and everyone was delegated to save Guy's Hospital at any cost. On behalf of Guy's Hospital we should like to thank the Fire-Fighting Services for their wonderful service which was rendered so generously.

How they arrived is difficult to understand, but next morning when the doors were opened at 8.30 a.m., the Out-Patients' Hall was filled with patients; all of them were examined, diagnosed and treated, if necessary they were admitted to Hospital. In less than three hours from the time we had sought out a mattress in some underground corner to rest our aching limbs we had returned to business as usual.

▭

To avoid the additional cost of postage, it would be appreciated if Subscribers would kindly forward their Annual Subscription (12s. 6d.) to the *Gazette* now due, without formal application, to: The Manager, Gazette Office, Guy's Hospital, London, S.E.1.

Ophthalmic Injuries in Warfare

A Clinical Lecture delivered at Guy's Hospital on Tuesday, 27th August, 1940, by Frank W. Law, Esq., M.D., F.R.C.S.

GENTLEMEN,—I thought that to-day I would take the opportunity of trying to interest you in some of the casualties to the eye which may occur in warfare. Not that these in many respects differ from civilian injuries except numerically, but there are one or two additional considerations such as the action of gas, and now—a subject of which I know very little—the effect of blast on the eye.

External injuries need not detain us long. Laceration of the lids, conjunctiva and cornea are routine matters. There is one important point in dealing with injuries of the lids—and that is that meticulous care is necessary in their adjustment and suture, and that care is always repaid, for a terrible-looking lid, torn almost completely from the face, may become quite a good-looking and functional appendage.

Let us now consider concussion injuries. Concussion of the eye may occur from injury by flying particles of the non-perforating variety; one is dealing with a perforating injury if the foreign body penetrates the globe, whether it remains there or not.

Non-perforating wounds by flying particles may cause hæmorrhage in various parts of the globe. The commonest of these is hyphæmia, or hæmorrhage into the anterior chamber. This is not in itself of importance, but it is indicative of intraocular injury, perhaps of some magnitude, and it is of importance in obscuring the view of the posterior segment, where damage may also have occurred.

Vitreous hæmorrhage may occur from a concussion injury and is usually from the retinal vessels, sometimes from the choroidal. It is remarkable to what extent a vitreous hæmorrhage may be absorbed even in the eye of an elderly patient, but in the young vigorous subject a severe vitreous hæmorrhage may become completely absorbed, leaving a good functional eye.

The changes which occur from concussion in the retina are referred to *en bloc* as *commotio retinæ*, and may vary from any degree of mild localised œdema to gross retinal and pre-retinal hæmorrhage with possibly detachment. Œdema may manifest itself ophthalmoscopically as a sort of watered-silk sheen on the retina. It may even show as a whitish or yellowish area which is difficult to describe, but is unmistakeable when once seen; in such a case it is likely that the pathological condition has not stopped at œdema but has gone on to a condition of coagulation necrosis.

Hæmorrhage is usually situated locally where the trauma occurred, but evidence of contre-coup hæmorrhage is not infrequent. I have had some cases of concussion injury of the retina to deal with in the present war, and all did extremely well, only one has to bear in mind that gross trauma to such a delicate tissue as the retina is irremediable. A certain loss of visual field is in the circumstances no great matter if the second eye is to be relied upon, but it is unfortunate that some examples of concussion injury show severe macular damage even when the injury was at a distance from this site. This, of course, will result in loss of central vision.

Concussion changes may include detachment of the retina, either as the result of hæmorrhage or occurring through the disturbance of the normal anatomical relationships between retina and choroid. It is therefore wise when dealing with prognosis in a case of *commotio retinæ* to say that the chances are good, but that after such a severe injury no guarantee can ever be given that detachment of the retina or other trouble may not follow.

A detailed account of treatment of the injuries I am speaking of is not now possible. The treatment of most of the concussion injuries consists of rest; the patient is put at rest and the eye at rest. In severe cases the condition of "bed absolute" is demanded, even to feeding and the use of a bed-pan. The eye is put at rest by the use of atropin and a pad and bandage, extended if necessary to the other eye, for it is very difficult for an active patient to rest one eye if the other is uncovered, and it is quite impossible to rest one eye if the other is engaged in, for instance, reading.

The next category is the perforating wound. Usually in warfare the perforating wound is due to a loose foreign body which may or may not be retained. The damage caused by perforating wounds as the result of flying particles varies enormously. A small sharp splinter may become embedded, and the eye, after the splinter has been removed, merely heals with proper treatment and rest. We need not here consider the whole question of perforating injuries since these do not differ essentially from those of civil life.

An obvious danger when dealing with a perforating injury to the eye is the possibility of infection, though the lack of frequency with which infection arises is surprising. It is probably due to the heat of the foreign body, for, small as the foreign body is, it has enormous velocity, sufficient to penetrate the eye, and presumably it is hot enough to sterilise itself as it goes. The most likely possibility is for infection to arise from the external tissues of the eye as the missile goes through, or endogenously afterwards.

The second danger which one must not forget to consider is sympathetic ophthalmia. Sympathetic ophthalmia, as you well know, consists in the excitation of an iridocyclitis, usually of the plastic variety, in the second eye as a result of perforating injury in the first. The injured eye is referred to as the exciting eye and the other as the sympathetic. Sympathetic ophthalmia is a perpetual danger, all the greater because of its rarity. There are one or two golden rules which, as one gets older in the subject, one begins to find a little less " golden," but they should, I think, generally be acted upon. One of them is that sympathetic does not arise in the second eye after the removal of the first. That has been disputed, but I have not met anything so far to contradict it as an axiom; the danger of sympathetic has passed after removal of the injured eye. Secondly, after sympathetic has arisen, in somebody else's case, of course (for one must not watch the eye give rise to sympathetic and hope that it will not), it is of very doubtful value—some say of no value at all—to remove the exciting eye. It is probably that the basis of the trouble is allergic, and one would think that the removal of the exciting cause, possibly the uveal pigment, would have some good effect on the progress of the second eye. Apparently that is not so, but I have had cases in which I have doubted the strict truth of that axiom.

The reason why one has any doubt at all about removing the injured eye is simply this, that it is quite possible that the injured eye, although suffering from iridocyclitis as a result of the iniury and giving rise to plastic iridocyclitis in the second eye, may recover a useful degree of vision. It is very galling to think that one might have had a useful eye in the one you removed when the one on account of which you removed it proves to be quite useless.

The early signs of sympathetic are an irritability of the second eye manifested by watering, and flushing on examination, and then later our old friend " K.P." (keratic precipitates). If there is evidence of cyclitis in the second eye you have an established sympathetic. If one gets an eye, which has been injured, continuing for a long time in an irritable condition, watering and red and failing to settle down, and then the second eye begins to show similar signs of irritability, the first eye should be at once removed.

I turn now to foreign bodies. Foreign bodies " in the eye," in the patient's phrase, are more frequently *on* the eye. When a person says, " I have a piece of grit in my eye," he usually means that he has a piece on the eye—on the cornea or conjunctiva.

I had the honour of being called to a South Coast town fairly recently to see some of the crew of a destroyer which had been bombed. In the case of a young lieutenant I removed from the corneæ seven foreign bodies on the right and six on the left, and I understand he has two quite good eyes. The foreign bodies, by the way, were all particles of hard paint from off the sick-bay wall. There were many on the conjunctivæ with which I did not worry him—he had other injuries and he was not co-operative, having been subjected to operation and not being fully round from the anæsthetic. He had wounds of Descemet's membrane and of the posterior layers of the corneæ and multiple superficial abrasions, but he was left with no foreign bodies on the corneæ, and, as I say, he is doing well.

I need not remind you that if a person claims to have something in the eye you examine the cornea under good lighting conditions with magnification; fluorescein should be instilled to lead you to the foreign body which you may have missed without it. Then you look in the subtarsal sulcus, one-third of the way up the posterior surface of the upper lid, which is often the site of the migrant foreign body which has not been washed by the tears to the inner canthus. Even if no foreign body is found it is advisable to stain with fluorescein in order to see whether a foreign body which has previously been there has caused a corneal abrasion.

The intra-ocular foreign body, the perforating foreign body with retention, is a serious matter. I have here a picture of the first British casualty of the war—not merely the first eye casualty, but the first casualty of any kind—who became my patient at Moorfields. This was a case of an intra-ocular foreign body—a fragment of a small hand grenade, the injury being received in the Maginot line last October.

Sir Richard Cruise tried very hard in 1917 to introduce a protective vizor for attachment to the steel helmet, and it was estimated after the last war that with this appliance something like 50 per cent. of war blindness might be prevented. It is probable that this percentage is due to the entrance into the eye of small particles which would be stopped by a protective device. I have pictures of Sir Richard Cruise's visor to show you later on, but they will almost certainly be excluded from the *Gazette* by the Censor if this lecture is published.

To explore the eye for a non-magnetic foreign body is a hazardous procedure. The danger of a retained steel or iron intra-ocular foreign body is that of siderosis, a degenerative condition set up inside the eye. Presumably, although we do not know its chemistry exactly, the soluble iron hydroxide has a predilection for the epithelial tissues which with Perle's reaction show the well-known blue-green stain. This applies to the epithelium and endothelium of the cornea, the epithelium of the iris and ciliary bodies, and, *par excellence*, the epithelial tissue of the eye of which one thinks first—the neuro-epithelium, *i.e.*, the retina ; hence the danger to vision.

If, however, one is dealing with a magnetic foreign body the removal is a more simple matter. There is considerable misconception about the technique of magnet removal of the foreign body, so I will indicate, purely as a matter of interest, how one sets about the removal of the retained steel foreign body.

The point of the procedure with the Giant magnet is to get the foreign body into such a position in the eye that one can remove it without unnecessary trauma. Generally one uses the Haab magnet ; at this Hospital we have such a magnet, but it is mounted on the Mellinger stand. The Haab magnet is preferable, mainly because it has its own foot switch—an accessory which we are going to have fitted, I hope very soon, to the magnet in this Hospital.

Supposing one has a large-sized steel foreign body which went in towards the periphery of the cornea, crashed its way through the ciliary body, broke up part of the suspensory ligament of the lens, and came to rest in the vitreous, leaving a gaping wound. That foreign body can almost certainly be removed from the eye by putting the patient in front of the magnet, switching on, and then dragging out the foreign body. But when this is done one may also drag out with it other things not unimportant in vision, such as the vitreous, the ciliary body, and possibly the lens.

The point of what I am saying is that the purpose of using the giant magnet—the Haab magnet—is to get the foreign body where one wants it. It is sometimes inevitable that if there is a retained foreign body in the posterior segment one has to remove it by perforation of the sclera and, of course, the choroid and retina—not pleasant structures through which to plunge one's knife, with all the possibilities of hæmorrhage, detachment, and so on. I have not yet seen any injury caused to the lens by the passage of a foreign body from behind forwards. Frequently the foreign body in going in will damage the lens, causing cataract, but if that has not occurred I have never seen it occur by dragging the foreign body to the position where one wants it and where it is best situated for removal.

The large magnet, therefore, is used to drag the foreign body forward. It finds its way by some rather mysterious means around the ciliary body, through the fibres of the suspensory ligament, into the posterior chamber. One sees it then bulging the iris ; one is usually told by the patient at this point (sometimes in very emphatic language) that something is happening. The foreign body is drawn through the pupil ; then one begins a surgical operation. The patient is put on the table, the eye washed out and fully cocainised, and one proceeds to remove the foreign body through a keratome incision. It is first advisable to move the foreign body with the hand magnet and drop it on the surface of the iris to avoid its becoming tucked into the angle of the anterior chamber, for the anterior chamber may be very shallow and the foreign body be caught between the iris and the cornea. It is well, therefore, to tickle it up with the magnetic field acting through the cornea, and then to draw the magnet away vertically, so that it will fall where you want it on the iris. A keratome incision is then made, losing the minimum of aqueous. The foreign body is then induced with the hand magnet to travel up across the cornea, and when you have got it opposite the point where you know the wound to be, you depress the posterior lip of the wound with the magnet and the foreign body comes out.

So many people think that the giant magnet drags the foreign body out of the eye, but if that is attempted it is often unfortunate and sometimes disastrous. The magnet is virtually useless for an embedded foreign body, since the magnetic field is too small.

I want now to say a word or two on the subject of blast, of which I know nothing except by hearsay. I am amazed at the stories I have been told about the effect of blast, and I have second-hand evidence of rupture of the globe merely through blast. I shall have one or two pictures to show you of comparable but by no means identical cases. The forces set up in the globe by the mere passage of a large foreign body such as a bullet may well cause hydrodynamic disturbances inside the eye similar to those caused by blast. I gather that if one is not otherwise protected the best thing to do in order to meet the effect of blast is to contract all your abdominal muscles and your orbicularis oculi. I have on the table one or two specimens which may interest you afterwards.

They are the specimens around which Sir William Lister's paper was written on ophthalmic injuries in the last war, and illustrate the stresses which are set up inside the eye, which Lister explains in characteristically lucid fashion in his paper. A certain number of cases of severance of both optic nerves by the side-to-side passage of a bullet are on record, and there is a specimen of one of these here.

I turn next to the subject of gases. Mustard gas is the most dangerous poison gas with which the eye has to deal—indeed I have no experience of any other—and its action is remarkable in its delayed nature. We were still seeing cases of gas keratitis—inflammation as we call it, though it is not an inflammation but rather a degeneration of the cornea—caused by mustard gas, the trouble making its appearance many years after the last war. The last of these cases I saw arose, I think, in 1932, which is a good fourteen years after the war ended; but the condition is not as mysterious as all that. Damage caused by the original gas injury brought about a local reaction, lachrymation, possibly actual burning, but I am not talking of that damage; that may be all recovered from, and no trouble complained of for years. The trouble arises from a sclerosing action exercised on the conjunctival and subconjunctival tissues which, by strangulation of the vessels, interferes with the nourishment of the cornea, a process which it is reasonable to suppose may take years.

The treatment of gas injuries is a difficult subject. You may have heard that Professor Eyre and myself have for some months been experimenting, with the collaboration of Professor Gibson, on this subject, and we have come to the conclusion that there is a substance which is effective in the neutralisation of an immediate mustard gas contamination. I emphasise the word " immediate." One need not expect much satisfaction if one has to deal with an eye which had been contaminated with mustard gas half an hour previously.

The treatment of the late effect of mustard gas has lately undergone a revolutionary change, with considerable hope for the afflicted person. I hope you will not get a mistaken idea as to the numbers of these cases. The number of people put out of action by being blinded by mustard gas is numerically negligible as wars go, but they are an extraordinary worry to those who are trying to deal with the late effects of mustard gas on the eye. At Moorfields we have seen most of them that have come for this latest form of treatment, and the numbers are in the fifties or sixties. The late effects of mustard gas burns were very difficult to deal with until we got on to the idea of fitting them with contact glasses and treating the active ulceration with short-wave diathermy applied locally to the eye. The contact glasses are finely ground perfectly fitting lenses which fit on the surface of the cornea under the lids. They were introduced originally for optical purposes, but they are used in this instance as a therapeutic measure. The visual effect is in some cases remarkable as a result of eliminating the surface of the eye as a refractive entity. However irregular it may be, if a glass is put in front of the eye and the space is filled with fluid the refracting surface ceases to exist, and the vision of the patient is enormously improved.

To touch on the hysterical manifestations—the ophthalmic hysterias, so to speak—of war, it is not an uncommon thing for a shell-shocked patient to complain of blindness. One should remember always the possibility of hysterical blindness in an otherwise wounded or blasted or shell-shocked patient.

Finally I may refer again to the question of protective devices which have lately been discussed in the Royal Society of Medicine; an account has been published in the *Proceedings*. On the basis of something in the neighbourhood of half the war-blindness being preventable, the figures are astounding when one remembers the number of men blinded in both eyes in the last war, and about four times that number were blinded in one eye. If one could have saved half of them by a protective device it would have been a very great achievement. Sir Richard Cruise had designed a chain mail vizor which can be brought down in front of the eye and pushed up again when not required; this, however, failed owing to the difficulties of production, since apparently chain mail is a hand-made product and very expensive in material. The new vizor has been turned out in duralumin, experimentally at first by an aviation company, and now elsewhere on commercial lines. It has been subjected to searching tests, though not, admittedly, to the impact of steel foreign bodies. But Sir Richard Cruise has proved that a 12-bore shot gun at thirty paces will project a lead bullet with sufficient penetrating power to go through a pig's eye and flatten itself against the egg-cup which was used to hold the eye in the experiment. In view of that it is reasonable to assume that anything which would stop such a projectile would stop a certain number of other foreign bodies, even though not necessarily composed of the same metal.

The first comment I anticipate on all this will be, " Yes, but what about the service efficiency of the man who wears the vizor? " There was a certain loss of field, which I understand has now been eliminated. The visual acuity of the average person wearing the vizor is either the same as without it or half-a-line or a line better. The visual acuity of the myope who may read 6.36 without the vizor may become 6.9 or even 6.6 with the vizor in position; this is due to the fact that the interstices of the metal act as a stenopatic aperture or pinhole camera.

At the conclusion of his lecture Mr. Law showed a number of lantern slides and specimens. His first pictures were from the drawings of Sir William Lister's cases of concussion injuries met with in military practice. One of them showed *commotio retinæ* of a rather gross type. It was this sort of appearance, said Mr. Law, that he had found in an officer who had been through Dunkirk and came to Guy's, where he was sent for examination in view of the possibility of an intra-ocular foreign body. The diagnosis of such a foreign body had been previously made on the mere ground that there was a wound in the lower lid, and therefore it was thought that there might be something in his eye. Had the pupil been dilated and an ophthalmoscopic examination made a change similar to the one shown in Sir William Lister's case would have been discovered. He agreed that it would not have eliminated the possibility of an intra-ocular foreign body, but it might have avoided the unfortunate result that the man had been walking about for three weeks using his eyes in the ordinary way. Another illustration from Sir William Lister's paper showed how the hæmorrhages could be absorbed quite well, and the exudate was also disappearing.

Another very beautiful coloured drawing showed the site of a foreign body which had entered and traversed the vitreous. The puckering of the retina with fibrous tissue formation which was left as a result of the passage of the foreign body was well shown. From such an example it would be realised what a danger was involved in the presence of an intra-ocular foreign body or damage of any kind in view of the contraction of the fibrous tissue leading to detachment of the retina. Another example was that of a through-and-through wound caused by the passage of a foreign body, and here again the track of fibrous tissue right across the vitreous was to be seen.

Another example showed the result of a foreign body which had passed through the cornea, iris and lens and had scored a " bull's eye " on the optic disc; the track of it was seen from front to back.

He came next to some of the astonishing results of destruction of the globe by the passage nearby of a foreign body of large size. In one example a foreign body had passed through the posterior part of the orbit. The result was to cause such changes inside the eye as to bring about a rupture of the globe. The cornea had been blown forward and was held to the eye by a strip of sclera. He thought it would be agreed from these and other examples that the results of the near passage of large foreign bodies were really very extraordinary. One would hardly imagine that the eye would be made to split and actually to burst in the fashion indicated. In some cases large splinters, he thought of wood, had passed into the orbit and were big enough to cause expansion of the orbital contents. These were enough to bring about a complete equatorial rupture.

Another example showed what happened after the passage of a bullet from side to side. Again there was to be seen the concentric rupture with the cornea pushed off the eye; the whole of the intra-ocular contents were bulging forward. One example of side-to-side perforation was the result of the passage of a bullet through both temples; it passed far enough posteriorly in this case to sever the optic nerves without damaging the eye. The soldier survived.

Another equatorial rupture was due to the passage of a foreign body through the outer side of the orbit. The illustrations included an interesting example of iridodialysis—a loosening or setting free of the iris, separating it from the ciliary body. In another class of case—retroflexion—there would appear locally to be no iris at all. The iris was bent backward towards the equator of the lens, presumably entangled in the fibres of the suspensory ligament.

He next showed some examples of cyclodialysis, the detachment of the ciliary body from the sclera. There was also posterior displacement, as was to be expected from the contraction of the meridional fibres of the ciliary muscle which would naturally draw a free ciliary body backwards.

The lecturer's final series of illustrations were of Sir Richard Cruise's vizor, made of duralumin, virtually negligible in weight and involving no interference when not in use. He showed how, if the perforations were extended posteriorly, the present loss of field would be eliminated. He could say from personal experience what a pleasant secure feeling followed from the use of the vizor. It was possible that at first the soldier might feel that he was less efficient with it, but it must be remembered that the steel helmet when first introduced into the army aroused considerable objection, until it was made a court-martial offence not to wear it. The photographs exhibited showed the vizor in various positions and the ease with which it could be adjusted.

Mr. Law's last picture was a photograph of the first casualty of the war to which he had referred in his lecture. It was a case of intra-ocular foreign body in the left eye, which he removed. He also placed side by side with the official photograph a picture paper's idea of the same patient, much to the amusement of those present.

Sector News

Guy's Letter

DURING the last weeks we have had every opportunity to show what physiologists are content to term an animal's adaptability to its environment.

Although the Hospital stands upright and scarred the work of demolition of the surrounding buildings has given us new sights, new noises and much dust. However, at the sound of any explosion we can now soothe our nerves with: " That's Down's," or " It's only the R.E.'s." But we mourn the end of the early morning entertainment we used to have in the College bedrooms for we shall not hear again the oaths of the warehousemen as they raised a sack of hops on a rattling chain and when it was up let it down again.

It is pleasing to say that Victoria and Addison are already once more open and filling up fast. Wherever there is damage to the Hospital it is being repaired with haste. The College Catering Company, who, like the Government, have oft times been the butt of criticism, deserve a tribute for the rapidity with which they set themselves up in the Staff Common Room in the Pathology Block so kindly lent them. All honour to their staff. The Residents have been provided with a room in the Medical School which, furnished with salvage from the College and the initialled table from the " Ship and Shovel," promises to be more than comfortable.

We conclude with a plea. The students, many of whom have just returned to Guy's after the quarterly changeover, have not quite " nought " upon which to lay their heads by night and almost " nought " whereon to rest their limbs by day. Their service to their Hospital in an emergency calls for more than this. We believe it will come.

R. T. H.

Orpington Letter

WE are very pleased to see that Dr. Johnson is back at his work in the P.A.I. Wards again, and are glad that he has made such a good recovery from his operation. We have a great respect for this doctor, with his sly humour and mature judgment, and shall not forget the welcome that he has given us since we first had to intrude at Orpington.

The Housemen have been looking after these 600 patients during his absence and these wards have formed a strange contrast to the drama of Casualty work. Here are long rows of lingerers in the " last scene of all," and between them are mingled one or two pathological curiosities that might have stepped from the pages of a text-book. We have managed to rescue some from the boredom of a chronic, but these are few, and this decision often rests upon the mentality of a patient, for some have become so wedded to the Institution that they have lost all desire to play a part in life.

A thirst for knowledge has arisen in the Mess, a good antidote to the Bacchanalian method of satisfying that craving that produced such a storm in the accounts of last month. We have decided to invite members of our staff to give demonstrations on various subjects each week. Mr. Medlycott began with a helpful talk on perforating wounds of the eye, and he explained the surgery of this rather mysterious structure with a simplicity that was most refreshing. We shall not forget his advice of a thorough examination, a test of the vision and an X-ray picture. We feel that this was a fine " aperitif " with which to begin our series and, as a taste of pleasures to come, we are looking forward to showing Professor Ryle our medical cases at some future date.

C. F. H.

Pembury Letter

DURING the past fortnight Pembury has experienced a good deal of weather, in fact, more than most parts of the sector. Secret, but unimpeachable sources of information tell us there has been a run on " Combs " and there is a danger of a local shortage.

This week a good many of our hardened students have left us, but we have many newcomers to take their places, and we welcome them all. Soon there will be a change of Residents, but more of that anon.

Pembury is to hold its own " Weapons Week," and we are honoured to know that Mr. Hughes is a member of the organising committee. We trust that a suitable proportion of the local wealth will find its way into the national coffers. Doubtless the nursing staff will be induced to lend part of their princely salaries!

Some time ago a Military Registrar and his staff were posted to the hospital. They started work in a corner of our commodious Staff Room, but with the passing of time it would be more accurate to say that the Staff now occupy a small corner of the Military Registrar's commodious room! For division of labour and diversity of forms, come up and see it some time.

Although our personal calling is that of a physician, we feel that all surgeons will be interested in the new geographical disease of a patient recently admitted with a diagnosis of "Dog Bight"!

N. M. J.

Farnborough Letter

THERE is a problem which has been cropping up on and off in our minds and our conversation for some time; last week this problem became crucial. It is a fundamental problem—that of the care of the aged, and its magnitude can only be fully appreciated by those who are brought into close contact with the work of Public Assistance Departments. At Farnborough, the crux was reached when it became necessary to refuse admission to a case of strangulated hernia and a case of appendicitis because of lack of beds. On the day when that occurred, the admission wards were full to overcrowding with unfortunates whose case-papers bore in the space assigned to the diagnosis the grim word "senility." In the male ward, venerable whiskers could be seen overhanging the sheets and in the female ward silvery locks peeped out from under shawls. Many of the owners of these appendages are characters as picturesque as any "Darby" you might meet outside the village inn or any "Joan" you might see knitting at a cottage door. Some, unfortunately, are frankly dirty or definitely "simple," but they are all HOMELESS.

Their plight is pathetic from every point of view. One of the most common effects of hospitalisation upon these elderly folk is to precipitate a confusional psychosis with disorientation, paranoid ideas and nocturnal delirium. There are also harmful effects on other interested parties. At Farnborough these are the more far-reaching insofar as there is no segregation of these "senility" cases within the hospital; the result is that they are found in small numbers in every ward, medical or surgical, and when the lights are put out in the evening there is at least one who will begin a noisy disturbance and so render sleep difficult, if not impossible, for the other occupants, who are really ill. Again, hardly a desirable state of affairs! The effect on the nursing arrangements is scarcely less deleterious; much time has to be spent in the performance of such tasks as bed-making and reassurance, all of which these people require in excess, so that there is correspondingly less time for attending to the legitimate patients and also the efficiency of the nursing is impaired by the extra fatigue entailed. There is a secondary bad effect arising from the fact that the wards are supposed to be training-grounds for nurses. Now people whose only infirmity is that resulting from their age do not make good cases from which to learn the intracacies of nursing, and when so much time is spent on them there is little opportunity for either teaching or learning on the more interesting material. The effect on the work of the medical staff is certainly less marked for, apart from a routine examination on admission and treatment for any incidental illnesses such as colds, little medical attention is needed by these cases. The Houseman is, however, placed each evening in the invidious position of having to decide whether to give sufficient sedative to keep his "senile" quiet, or to condemn the rest of his patients to a sleepless night for the sake of his "senile's" chest.

The gloomy picture which we have painted obviously calls for a remedy. We do not know how far the state of affairs therein depicted may be peculiar to our own hospital, but there is good reason to believe that the broad outlines apply fairly generally. The problem of the care of the aged must have been always a difficult one but it has been rendered very much more acute by the war. Evacuation, destruction of houses and the necessity for sleeping in unusual places have all added to the difficulties. The solution adopted (we hope only as an emergency measure) has been to thrust all aged people who cannot be looked after by private enterprise into hospital. These aged people have all been active and mostly very worthy members of the community when in their prime, and they have a right to expect the community to see to it that their declining years are made reasonably comfortable. Various suggestions have been made to this end, but it would be premature to elaborate them at the present juncture, so, having aired our grouse we will stop short of "cooking our goose."

It is perhaps unfortunate that this outburst should have appeared in the first Farnborough letter since the arrival of the new firms; however, in welcoming them we can assure them that there is any amount of excellent clinical material, even though it is somewhat diluted, within the wide ramifications of their new station.

V. C.

Correspondence

Fire Spotters

To the Editor of the GAZETTE

SIR,—The events of the night of Dec. 29th at Guy's provided the clearest demonstration possible of the value of fire spotters. Anyone who has viewed the surrounding district from the roof of Nuffield House or Hunt's House cannot have failed to be struck by the fact that Guy's now stands an oasis in a desert of gutted warehouses and other buildings. Not that Guy's escaped its baptism of fire. At least thirty and probably fifty incendiaries fell on the Hospital itself, most of them simultaneously. All of these except one, which burnt out the Externs' room, though not before the panels had been stripped from the walls and taken to a place of safety, were spotted and promptly dealt with by all sorts of people, but chiefly by the forty students who were here on air raid duty. But for their presence it is probable that Guy's would have been so severely damaged as to find it difficult to function at all. It is true that two parts of the Hospital were destroyed by fire—the deep therapy department in the roof of Hunt's House, and the southern wing of the College—but in both cases it was due to spread of fire from neighbouring buildings. In the case of the roof of Hunt's House students made a desperate effort to save it by carrying up pails and buckets of water. This was, however, totally inadequate. What was needed was a portable pump of the Coventry type, which we made efforts to obtain for some months past. Many and varying opinions have been expressed during the past year as to the need for students on air raid duty. There can surely be no grounds for controversy any longer. Great though my personal regret is that I was not here myself on that Sunday night, it is quite clear that no one could have dealt with such an extreme emergency more competently than Mr. Hedley Atkins, and it is from him that I have received the most glowing accounts of the most magnificent behaviour of so many people who were here that it would be invidious to mention them by name. I should like to associate myself with the Group Officer in the appreciation he has already expressed in a letter to me, copies of which have been posted in the Hospital.

About three months ago I made an appeal in your columns for hospitality for medical officers, students and nurses who were working under the considerable strain of the nightly London blitz. The response to his appeal was most generous and, in fact, I was rather embarrassed by the fact that the supply of hospitality was considerably greater than the demand for it. This was not due to any lack of appreciation, but chiefly to a general desire to stay here and stick it out. The concern for the welfare of those working at Guy's was, however, so clearly expressed by those of your readers who wrote to me that I am encouraged to suggest a way in which they could help. There were a few people who lost personal belongings on December 29th, in some cases because they were attending to their air raid duties instead of salvaging their own property. Most of these are students and others who can ill afford to replace it. Small contributions to enable me to assist these people would be most gratefully accepted by me to distribute at my discretion. Should I receive more than is needed for this purpose I would add it to the nucleus of a Guy's Rebuilding Fund which has already been established.

Yours, etc.,
P. M. F. BISHOP,
Deputy Superintendent, Guy's Hospital.
Guy's Hospital, S.E.1.

"Trainees" in Pathology for the E.M.S.

To the Editor of the GAZETTE

SIR,—In the current issue of the *Guy's Hospital Gazette* I saw with considerable surprise an invitation to qualified men of house-official status to become "trainees" in pathology for the E.M.S. at a salary of £200, nothing found.

I know of several pathologists of experience whose services, offered before the war started (and afterwards) have not been accepted, and of others whose salaries have been reduced beyond the level at which it was possible for them to live with their existing commitments.

Why must the appointments that these men should have had be given to men of military age? And who, in any case, are in a position, not possible to older men, to adopt another branch of the profession?

Furthermore, the E.M.S. laboratories were originally founded "to supplement existing facilities and not to supplant them" (actual wording of Sir A. S. McNalty).

Now, however, this promise has been unblushingly broken, and the laboratories have been empowered to commandeer all public health work at a flat rate of 3s. per specimen—a remuneration which can only be made to pay in the case of diphtheric swabs and gonococcal smears. Now it is announced that the pathological work of private practitioners is also to be taken over.

As a consequence, those of us who have depended for years on pathology for a livelihood now find that livelihood taken away.

The E.M.S. laboratories have now, it seems, more work than they can manage—hence the "trainees."

What will happen when the expected epidemics arrive is not clear. What *is* quite clear, however, is what will happen to all the other pathologists. They will have to file their petitions in bankruptcy.

Yours, etc.,

J. W. SHACKLE.

Brooklea,
Scrase Bridge,
Hayward's Heath,
Sussex.

An Appreciation

To the Editor of the GAZETTE

SIR,—I should like to thank all the House officers and students who worked so splendidly on Sunday, December 29th, to save the Hospital from destruction by fire, and who made it possible to evacuate all patients and personnel without a single casualty. One has only to see the devastation around to realise how prompt and spontaneous intervention on the part of students prevented fires such as destroyed neighbouring buildings from gaining a hold on the Hospital. There was no time to issue orders because no sooner had the incendiaries fallen than they were automatically extinguished by those nearest. Nobody so far as I could see paid the slightest attention to his own personal safety, and it is by the greatest good fortune that no House officer or student suffered for his devotion to Guy's.

Yours, etc.,

Guy's Hospital, S.E.1. H. J. B. ATKINS.

Entry of 1st Year Students

To the Editor of the GAZETTE

SIR,—The opinions stated by your six correspondents regarding the entry of first-year students is short-sighted in the extreme. These gentlemen appear to be concerned rather with the extent and "rake-in" of their practice after the war than with the health of the people of this country.

That there is an acute shortage of doctors at present is demonstrated by the complete dearth of adequately medically-staffed air-raid shelters, which is extremely prejudicial to the country's interests. We have also to bear in mind the fact that the wrecks of humanity which will survive this war will call for more medical aid and treatment than could possibly be supplied by the pre-war number of doctors.

Secondly, I have yet to hear of any community in the world which can boast of "too many doctors."

Thirdly, Guy's has always been one of the most difficult hospitals into which one may gain entry—for studying purposes. Sons of Guy's men and those with good academic records being the more favoured. This is a very correct attitude for the authorities to have taken up, not only for the good of the Hospital's truly great reputation, but also for the good of the future patients of these students. Now in war-time it is even more difficult to become a Guy's student.

Finally, I should like to know, how does one judge a prospective student's "suitability as a good doctor" if not by his academic achievements —by appearance?

These points seem to me to amply justify the increase—if there be an increase—of medical students. In fact, in the interests of the country I would call for more men willing to undertake the five-and-a-half year course of study, telling them at the same time that they are doing a good job of work for the country.

In conclusion, may I say that I am a third-year student, in order to avoid any specious accusations against my integrity.

Yours, etc.,

"NEMLAZ."

13, Beulah Rd.,
Tunbridge Wells,
Kent.

Reviews

Guy's Hospital Reports. Vol. 89 (Vol. 19. Fourth Series.) No. 4, 1939.

THIS number of the REPORTS is a special number dedicated to Sir Arthur F. Hurst, D.M., F.R.C.P., Consulting Physician to Guy's Hospital, in commemoration of his 19 years of editorship. The REPORTS first appeared in 1836 and were published as a yearly volume up to 1915. Publication ceased during the Great War, but in 1921 they reappeared as a quarterly journal under the editorship of Hurst. With the publication of the third part of the 1939 volume Sir Arthur ceased to be editor owing to his retirement from active work as senior physician to the Hospital. It is indeed appropriate, therefore, that the fourth and last part of this volume of the REPORTS should commemorate "a great editor and a great physician."

Mr. R. C. Brock writes an editorial outlining Hurst's association with, and influence upon, the REPORTS. Since 1906 Hurst has been personally responsible for no fewer than 78 contributions to the REPORTS. His stimulating influence upon his juniors has produced 61 contributions from his registrars, house physicians and clinical assistants, together with 25 contributions from his private clinic at New Lodge, Windsor. His unremitting labour as editor during 19 years has maintained a journal of a high degree of excellence and gained for it a world-wide circulation and popularity.

Many of Hurst's classical papers have appeared in the Reports and from this wealth of material Mr. Brock has undertaken the difficult task of selecting representative papers for republication in the present issue. Thirteen such contributions have been selected and form the basis of this number. They are truly representative of Hurst's pioneer work, of his classical descriptions of diseases and syndromes and of his widespread knowledge and experience of all aspects of medicine.

The first two articles reprinted are Hurst's classical papers: "The Passage of Food along the Human Alimentary Canal" (1907) and "The Sensibility of the Alimentary Canal" (1910). There later follows "The Nature and Localisation of Visceral Pain" (1929) as a more recent example of his contributions to the study of the physiology and pathology of the alimentary tract. As a world authority on peptic ulceration and other diseases of the stomach and duodenum, the articles selected to illustrate this aspect of Hurst's literary works comprise "Gastric and Duodenal Ulcer as Family Diseases" (1921), "The True Incidence of Hyperchlorhydria in Gastric and Duodenal Ulcer" (1929), "On So-called Gastric Hypertonus and Gastroptosis, and Atonic Dilatation of the Stomach" (1927), and "Chronic Peptic Ulcer of the Oesophagus" (1934). Hurst's early interest in neurology and his contributions to knowledge during the Great War are both well shown in the reproduction of his paper on "The War Neuroses and the Neuroses of Civil Life" (1920). The selection of examples of his powers of classical description of syndromes and diseases, although of necessity condensed, is particularly apt. In this category there appears "The Achlorhydria of the Addison's (Pernicious) Anæmia—Subacute Combined Degeneration of the Cord—Hunterian Glossitis Syndrome" (1926), "The Plummer-Vinson Syndrome" (1926), "B. Coli Cholecystitis" (1932), and "Anal Achalasia and Megacolon" (1934).

To complete this number of the Reports there is included a complete bibliography of Sir Arthur's contributions to the Reports, to other journals both British and foreign, and to numerous books. These references are to all who know the quality of his writings, an amazing proof of his indefatigable energy and wide interests.

This special number of the Reports, from the account already given of its contents, will need no recommendation to Guy's men nor for that matter to medical men the world over. It forms at the same time a history of Guy's Hospital Reports, a history of Hurst's editorship and of his influence on the journal and on medicine in general, a collection of classical papers which will never be reproduced again, and not the least, "a monument to a great editor and a great physician." The new editor, Mr. R. C. Brock, is to be highly congratulated upon the production of a number of the Reports which will be immortal and which will be read by everyone professing the slightest interest in either the art or the science of medicine.

S. H. W.

Hospital Information, etc.

Notice

SOCIETY OF APOTHECARIES OF LONDON.

The Society's Examination for February are as follows :—

Surgery, February 10th, 12th, 13th.

Medicine, Pathology and Forensic Medicine, February 17th, 19th, 20th.

Midwifery, February 18th, 19th, 20th, 21st.

Pass List

UNIVERSITY OF LONDON
FIRST EXAMINATION FOR
MEDICAL DEGREES
(For External Students)
December, 1940

R. F. B. Brierley
C. M. Cade
S. Davis
G. Forrester
G. E. Griffiths
D. A. Harris
A. M. Huntley
R. C. Jennings
J. O. Kelsey
M. B. King
R. P. C. MacDonald
C. M. G. Pearson
H. W. Topham
R. G. Walton
P. Westcombe

(For Internal Students)
December, 1940

E. R. Arnold
R. R. W. Nichols
N. G. Nicholson
P. F. Stebbing
N. C. T. Watford

The following Higher School Candidates have completed exemption from the First Medical :—

N. J. Block
D. Davies
T. G. Hooson
W. R. Lee
J. M. Pugh
E. A. Wright

M.D. EXAMINATOIN
December, 1940
Branch IV
(Midwifery and Diseases of Women)
I. E. J. Thomas

Births

KARK.—At Boston, U.S.A., to Dr. and Mrs. Robert M. Kark, a son.

Marriage

TOMLYN—PLANT.—On January 4th, 1941, Felix Tomlyn, L.D.S.Eng., to Patricia Margaret Plant, 44, High Street, Sevenoaks.

LIMPENNY—BOOKER.—On January 16th, 1941, at St. Barnabas Cathedral, Nottingham, Francis T. J. Limpenny, L.D.S., Lieut. A.D. Corps., to Madge Booker.

ELLIS—RUSSELL.—On 18th January, 1941, Richard W. B. Ellis, M.D., F.R.C.P., to Audrey Eva Russell, M.B., B.S. Temporary address: Church Leys, Rearsby, Leicestershire.

Death

BRENCHLEY.—On December 5th, 1940, at Bournemouth, Algernon Dulton Brenchley, M.D., aged 86 years. Master of the Society of Apothecaries, 1924-5.

PERRY.—On January 9th, 1941, at Headcorn, Dr. Chas. Ed. Perry, aged 85 years. Internment Hawkinge, Folkestone, January 13th.

Eds. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *8th February* 1941 *Number* 1371

PASSIM

THE recent lull in night bombing activity has seemed at times almost unreal, but there is still ample work in the hospital to keep most people busy. As the demolition of surrounding buildings proceeds, St. Thomas's Street and Great Maze Pond have come to present a spectacle of destruction which rivals the worst pictures of the ravages wrought in the Spanish Civil War. We are the all more thankful that the main structure of our hospital is virtually untouched; six wards are in constant use for in-patient treatment and for the reception of casualties, whilst the front Surgery and Out-patients' departments are maintained at pre war levels. Although the Massage department has been converted in part into a female ward, the Physiotherapeutic department continues to perform excellent work, the results in some cases, as stated elsewhere being little short of miraculous. Addison ward is fully occupied with the treatment of Influenza; fortunately, the type so far encountered has been simple and catarrhal in nature, responding rapidly to symtomatic treatment in hospital. The exigencies of our Winter climate, the close congestion of incipient cases in underground shelters, and the lack of facilities for the home treatment of a common cold in its early stages, have all contributed to the seasonal rise in the number of cases. The daily press has, however, relieved all anxiety by informing us that there could now be no danger of an epidemic since the number of cases reported had not exceeded a certain figure on a certain day!

The question raised in the GAZETTE last week of the hospitalisation of the senile and the homeless is one of great interest to all who have stayed for any length of time at any of the base hospitals in the sector. This problem had been but partly solved in times of peace, and to-day has become of pressing importance. There is apparently such a shortage of medical man power in the country that certain groups of refugee doctors are to be allowed to practice medicine in the interests of national defence. We have also to welcome the advent of American doctors although as yet in the *role* of observers. In these circumstances, with the ever present threat of invasion looming large again in the daily press, it is necessary that as far as is possible, medical men should be occupied with truly medical matters, whether clinical, administrative or researching nature. The same considerations apply even more strongly to the nursing profession whose shortage is even more accentuated by seasonal incidence of specific fevers. The types of senile patient with which we are confronted daily may be divided into those firstly who, after appropriate surgical or medical treatment, have sufficient means or willing relatives to enable them to resume a life of their own. Secondly, those who may similarly be restored to health, but who owing to lack of finances or relatives or on account of enemy action are unable to support themselves. Thirdly, are those for whom return to sufficient physical or mental health to enable them to be self sufficient is extremely improbable, including those who through infirmity are confined to bed, and the very last group indeed, who are neither infirm nor need medical aid, but who have no homes of their own nor means of self sustenance. This last group has inevitably increased as the result of indiscriminate night bombings. To-day all these groups apparently are to be admitted into our sector hospitals to occupy beds for the duration if not indefinitely.

The effects of Hospitalisation are often far from advantageous; one and all they have an inherent fear of the Institution or Workhouse, and, if they are not physically ill, an acute confusional state often results, which, terminates in a confirmed dementia. Similarly the admission of such cases to the general ward is disadvantageous to the other patients, the nurses and the doctors alike. To the young health officer, a large sprinkling of such cases who neither require nor desire treatment is most dispiriting, and the blockage of beds which could be utilised for acute cases or reserved for raid casualties is disheartening. For the nursing staff, whether probationer or state registered an eternity of restraining and of bed making is neither adequate training nor satisfactory nursing, whilst for the other patients in the ward, the prescence of those who feel impelled to get out of bed, to sing and to dance at night is far from conducive to healthy slumber. In peace time it should be possible to classify these patients before admission into those who really need hospital treatment those who would greatly appreciate a cottage life, modelled on the old almshouses principal either with or without or following treatment and those who would require institutional treatment for the remainder of their span of life. In times of war, in the simple scheme it is too ambitious for those who require urgent hospital treatment must of course be admitted. The large majority, however, do not, but they are all equally worthy of sympathy and every possible consideration must be made for their comfort. There is no reason whatever why they should occupy beds in the sector which is not only as liable as any other to the effects of air raids, but must also be of vital importance in time of a hypothetical invasion.

It is a pity, from this point of view, that the sector should have been centred around London, but there is no justification for a rigid respect for boundaries and arrangements could be made for temporary accommodation of these people in evacuated centres until their future wants can be satisfied in a post-war world. The recent pronouncement that all children who have suffered either physically or mentally as the result of air raids are to be compulsorarily evacuated from London is very welcome. The mental effects of the raids upon children have proved to be almost negligible, but the physical effect of long hours in communal shelters cannot fail in the end to be deleterious. We can respect, even if we do not approve, those parents in the Borough who have not allowed their children to be evacuated voluntarily, but ss soon as any question of their health arises we must endorse this proposition for compulsory evacuation.

◆

IF and when the enemy attempt an invasion, they will do so through our weakest point. At the same time probably the most terrible kind of war waged on civilians would be that which used poison gas.

The military authorities are doing everything to protect us; curbing their impatience to retaliate in kind to the bombardment of our cities and towns, they methodically blot out one invasion port after another. The navy at great risk to personnel and ships, brings stores of food and war supplies as well as patrolling the seven seas in search of enemy prowlers. The army, too, is performing the very important task of organizing a planned fighting resistance to any attempted invasion.

In point of fact there is one blatant hole in our defences and that is our casual preparedness for possible gas attack. Civilians generally and even some of the Forces, seldom carry their gas masks and have little or no regard for their maintenance. Without causing an unjustified terror among the people, it is the duty of all doctors to draw everyone's attention to this apparent defect, firstly by respecting it themselves, secondly by educating everyone in the proper adjustment and use of their gas masks, and thirdly by organizing regular drill periods among their hospital people and patients.

It is quite possible that if the civilian response is extensive enough, the enemy will feel that attack by this route is as useless as trying to penetrate the concrete blocks, the barbed wire and land mines of our coastal defences. This prophylactic preparation may well prove to be an important feature in winning the war.

Obituary

MRS. DAVID FORSYTH

A perfect Woman, nobly planned
To warn, to comfort, and command
And yet a Spirit still and bright
With something of Angelic light.

TO the poem of which the above lines form the termination Wordsworth added a note: "It was written from my heart."

So should anyone write who has the late Mrs. David Forsyth as his theme. That such a one should be allowed to pass without any recognition of her worth as a former member of the Guy's Hospital Nursing Staff is quite unthinkable. Generally admired, Miss Neale, as she then was, was singularly unspoilt by contact with the world and always maintained a quiet dignity amidst the worry and anxiety of the work that became her duty and, later, her pleasure.

She received the nickname, most appropriately, of " Diana ". It is recorded that one day she naively asked one who was honoured by her friendship if Diana was a pure and moral goddess. The affirmative answer much pleased her.

Of quite stately appearance, not very apparent always in women of the present generation, she did an immense amount of useful work as head nurse in the Front Surgery. Later she became Sister in the new department for treatment of disease by means of various rays.

She was worshipped by the patients who came under here care. Though of a commanding appearance, she was always tactful and helpful to patients, students and house officers. She looked rather than gave commands and the assistance which she was always so ready to give to anyone had gentleness and commonsense as its principal foundations. Rarely can commonsense and uncommon appearance have been so tactfully blended as they were in the subject of this short notice.

The last time I saw her she was on a 'bus travelling from London Bridge to the West End. We were both beginning to think of the downward path but she was still the same object of reverence coupled with admiration as she had always been to me and it is not to be thought that, by her at any rate, was the downward path to be mourned.

She was always one who did her duty at whatever hour of the day or night or whatever the period of life in which she might be called upon to perform it. She spoke with modest pride of her children. I left her with a sense of gratitude in my heart that I had been privileged to know her.

A FORMER STUDENT.

Bronchiectasis, Antelectasis and Lobar Collapse

By H. C. Cameron, Esq., M.D.

The Factors concerned in the Production of Bronchiectasis

THE introduction of lipiodol, an iodized poppy seed oil, in 1923 by Sicard and Forestier was perhaps the greatest advance in radiographic methods since the opaque meal rendered possible the study of gastro-intestinal movements. By outlining the bronchial tree it has made plain to us the great frequency of bronchiectasis. In ordinary X-ray examination bronchiectasis, at least in its lesser degrees, often shows little abnormal. The bronchial shadows may appear of little greater density than is usual. With lipiodol it is possible to see the degree and extent of even slight bronchiectasis and to contrast it with the normal contours elsewhere in the lungs. Before lipiodol the diagnosis was seldom made until the clinical picture of chronic pulmonary suppuration had developed. Lipiodol has made it clear that the changes in the bronchi usually precede this development by months or years.

Massive collapse of the lung as a sequel to prolonged anæsthesia and surgical operations was first described completely by Sir James Barr in his Bradshaw Lectures, and, as a result of more frequent X-ray examination, it is now known to be of not infrequent occurrence. In 1911 Dieulafoy wrote an account of the clinical findings in cases of mediastinal effusion, and shortly afterwards the radiological picture in this condition was recognized as a right-angled triangular shadow at the base of the lung, one side of which rests on the diaphragm and the other on the mediastinum, while the hypotenuse runs from the mediastinum downwards and outwards to the diaphragm. This shadow, since it is more often encountered on the left side, is apt to be somewhat encroached upon by the shadow of the heart, although in general it is unmistakable. As experience accumulated, however, it was recognized that although this triangular shadow can occur as the result of mediastinal effusion, as has been demonstrated both at operation and post-mortem, another explanation was more common. In 1926 Singer and Graham showed that a similar shadow was cast by the collapse of a lower lobe, and, moreover, that it was usual to find that bronchiectasis could be demonstrated by lipiodol in the collapsed lobe. The association of collapse and bronchiectasis is today seen to be so frequent that it has led many to argue that collapse is perhaps the most powerful of all the causative factors at work in the production of bronchiectasis.

Why are atelectasis and lobar collapse of such frequent occurrence in childhood ? To this question the work of Yale Henderson and Coryllos and others has gone far to furnish an answer. Their views, perhaps, may be summarized as follows :

Of all the factors concerned in the production of atelectasis and lobar collapse, the most important is that of the size of the thorax, determined by the contraction and relaxation of all the muscles of respiration, but especially of the diaphragm.

The variations extend from maximal inflation to atelectatic deflation. In a loss of tonus of the respiratory muscles, and indeed of all the muscles of the body, we find the explanation not only of atelectasis and massive collapse, but indeed of most other features of post-operative depression of function. Tonus is induced in the muscles by the influence of the nervous system as well as by the metabolism and respiration of the muscles themselves. Tonus is therefore an index of the state of the nervous system and an expression of the vitality of the body. When a patient is too weak to stand or to hold up his head his condition is one of extremely low tonus. In a man just dead from a sudden heart attack artificial respiration can at first expel air from the lungs and the tonic elasticity of the chest will draw air in again. But as the nerve centres fail under asphyxia, the elastic recoil of the respiratory muscles diminishes, until the thorax becomes deflated down to the size natural after death in the corpse, with a volume of air in the lungs less than half of that present in healthy life. X-ray examination has shown that in men during the apnœa which follows upon forced breathing, the position of the chest becomes that of passive expiration. The elasticity which normally keeps the thorax fully expanded is thus seen to be not a mere mechanical condition, but a vital property under the control of the respiratory centre. If tonus is diminished artificially by overbreathing the elasticity is correspondingly lessened. In the depression of vitality which follows upon long anæsthesia and extensive surgical interference the thoracic cavity may be so much diminished in size that the lungs are nearly deflated. In such circumstances the vital capacity may be decreased by as much as fifty per cent; in this diminution it is evident that the relaxation and loss of tonus of the diaphragm plays the chief part. Under the X-rays it may be seen to have risen seven or eight centimetres, reaching a point far higher than it achieves by the most forcible effort of expiration. Such deflation of the lung results from this loss of muscular tonus that many areas of atelectasis are produced, areas which are to be observed in post-mortem examination of almost all persons dying soon after prolonged surgical procedures. Atelectasis of this sort is always accompanied by a rapid pulse and shallow breathing.

But such a condition of atelectasis is not one of massive collapse. For the production of massive collapse something more is required. In a lung so deflated from loss of muscular tonus, with the expiratory power so diminished, it sometimes happens that a plug of mucus accumulates in one of the main branches of the bronchi in such a way as completely to occlude it. The air in the lobe so shut off is then rapidly absorbed into the blood stream and the lobe collapses. As one lung collapses it draws the mediastinum after it and atmospheric pressure inflates the other lung. Massive collapse is for this reason confined to one side, because the collapse of one lung tends to expand the other. The final confirmation of this purely physical explanation is provided by finding that when the plug of mucus is removed by means of bronchoscopy, as Chevalier Jackson first showed, the lung is in many cases rapidly reinflated.

Although these observations have been made for the most part in cases of lobar collapse as it occurs after prolonged surgical operations, they apply with equal force to the loss of tonus and the fall in vital capacity which occurs as a consequence of severe prostrating illnesses in young children. The younger the child, in all probability, the more unstable is the physiological mechanism on which this vital property of muscular tonus and thoracic elasticity depends. In almost all post-mortem examinations carried out on young children dying after debilitating illness, we are accustomed to see significant areas of atelectasis, while routine X-ray examination has served to show the great frequency of the triangular shadow which usually, though not always, betokens the further complication of massive collapse.

The lungs are normally equipped with an elaborate apparatus designed to keep the airways empty of secretion. Ciliary movement, the muscular contraction of the bronchial tubes and the reflex cough with a powerful expiratory blast, together achieve this purpose. In infancy and in the prostration of sickness the cough reflex is relatively less powerful and efficient. The frequency of atelectasis and lobar collapse in young children may well be due to a combination of these factors: the relative ease with which muscular tonus fails in the prostration of severe illness, and the comparative ineffectiveness of the cough.

A well-drained infection is a relatively harmless infection. Occlusion of the bronchus leads to stasis and persistent infection of the bronchial wall. It is not probable that all bronchiectasis is preceded by lobar collapse; that it is so in many cases and that the condition of collapse powerfully predisposes to the bronchiectatic change is undoubted. The healing of all bronchopneumonia, as compared with lobar pneumonia, is slow and partial because the involvement of the bronchial wall is primary and invariable. The walls of the smaller tubes may be destroyed within a few months. However active later repair and healing may be, there is commonly an irreparable loss of elastic, muscular and sometimes even of cartilaginous tissue from the submucosal layer, while the damaged bronchus is relined not with ciliated but with stratified epithelium. Cilia, muscle and nerve ending, the three factors which together function to effect drainage and to keep the lumen of the bronchus empty, are all destroyed in greater or less degree. Destruction and fibrous replacement of the circular and longitudinal elastic coats of the bronchi probably account for their failure to keep their normal shape and calibre. Recently, it is true, Lander and Davidson shown have that bronchiectatic tubes, outlined by lipiodol, visibly dilate upon inspiration, and argue from this that in bronchiectasis the elastic character of the wall is retained. This retention of elasticity, they urge, is evidence against the view that infection of the bronchial wall is a necessary preliminary to bronchiectasis, because infection would destroy elasticity. It is possible, however, that the dilatation of the shadow upon inspiration is not evidence of active contraction of the bronchial muscular and elastic tissue but a passive dilatation of toneless walls brought about by the movement of inspiration. Inflammation of the bronchial wall, deformity and functional crippling, together conspire to permit the retention and stagnation of infected secretions. The prolonged contact with the purulent exudate helps to keep alive the inflammatory process in the bronchial walls and to encourage its spread to the surrounding interstitial tissue and parenchyma of the lung. Sooner or later there comes invasion by the anærobic organisms which normally reside in the mouth and nasopharynx. The purulent exudate becomes profuse and liquid and spills by gravity. Thus is gradually produced the well-known clinical picture of severe cough, initiated by changes of posture, and of chronic sepsis with secondary osteo-arthropathy and amyloid degeneration of the viscera. The gradual character of the development explains the constancy with which in the case histories of bronchiectasis the cough is said to date back many years to an attack of bronchopneumonia in early childhood. In a large series of cases such a history was obtained in 67 per cent. of all cases. Whooping cough, even without definite pneumonia as a complication, is a not infrequent precursor, as are attacks not of measles *per se*, but of measles which has been complicated by pneumonia. That the origin of bronchiectasis was generally to be found in a severe pulmonary infection in early childhood and that its later development was gradual and progressive, was recognized long before X-ray examination of any sort was possible. It is to the use of lipiodol that we owe the power to detect the condition in its earliest stages, when the changes are minimal and symptoms have not yet become obtrusive. To lipiodol, too, we owe the knowledge of the frequency with which lobar collapse leads directly to bronchiectasis unless reinflation can be effected.

Diagnosis

In early cases the most constant symptom is a persistent or a constantly-recurring cough, with or without fever, and often with surprisingly little failure of nutrition. The face especially is often rounded and plump and the colour good. The cough in young children may not lead to expectoration, although it is in general a moist cough with a sound suggestive of moving secretion. Chronic sinus infection is a very common accompaniment. In a small minority of cases aspiration of a foreign body has been the cause, and the possibility should be borne in mind. Hæmoptysis is an occasional symptom. In the later stages the quantity and the foulness of the sputum is often diagnostic. In more than half of the cases the fingers are clubbed.

Physical signs vary very much and bear little relation to the extent of the bronchiectasis. Sometimes none are forthcoming. As a rule crepitant or sub-crepitant rales are persistent at one or both bases, often elicited only after coughing. More rarely, as the result of the accompanying fibrosis, areas of dulness to percussion with bronchial breathing and bronchophony can be demonstrated. The form of fibroid lung and bronchiectasis seen in adolescents and adults —with extreme contraction of one side of the chest, displacement of the mediastinum, hypertrophy of the opposite lung and striking dulness with bronchial breathing, bronchophony and pectoriloquy over the shrunken lung—is not met with as a rule in early childhood.

X-ray examination may show hard, wiry, strand-like densities following the course of the bronchial shadows. On the other hand, considerable bronchiectasis may exist without any abnormal shadows being apparent. In cases associated with lobar collapse the characteristic triangular shadow, usually behind the heart shadow on the left side, will be apparent. Examination by lipiodol will determine the degree and extent of the dilatation and make clear whether the lesions are localized or diffuse, and whether cylindrical or saccular. It is not to be presumed, however, that cases in which the dilatation appears on examination with lipiodol to be of slight degree are necessarily less seriously affected or that the prognosis must necessarily be favourable. The study of the contour of the shadow gives little indication of the functional incapacity of the tube, and in practice we still lack means to determine the future course of the disorder. With slight changes the course may yet be rapidly downhill, while extensive changes are not incompatible with arrest and improvement of the symptoms. Saccular bronchiectasis in general has more severe symptoms and a worse prognosis than cylindrical. The younger the child, the more fatal the condition. Cases which show improvement do so as a rule within the first few years after the initial infection. The death rate in childhood is probably high and it may be that it is this high rate which accounts for the comparative rarity of bronchiectasis in adult life, rather than any tendency of the condition to complete recovery.

Treatment

Early or localized bronchiectasis as demonstrated by lipiodol, often without symptoms or physical signs, should be guarded so far as possible from risk of reinfection. Any accompanying sinusitis or chronic tonsillitis should be dealt with radically. Postural drainage should be attempted daily whenever there is any evidence of sputum. No form of pulmonary disease benefits more strikingly by climatic treatment in a dry, sunny, warm atmosphere, which permits of a life spent constantly in the open air. Advanced cases may be relieved by persistent postural drainage and by periodic bronchoscopy and aspiration of the secretions from the dilated tubes.

For hope of cure we must rely upon the rapidly-developing operation of lobectomy. As the technique of this operation has been perfected, a death-rate at first all too formidable has fallen to the neighbourhood of 25 per cent. In view of the gravity of the prognosis in established bronchiectasis, this operation may well be performed in cases in which the disease is confined to a single lobe. In so-called atelectatic bronchiectasis the results appear to have been especially favourable.

REFERENCES

Henderson, Y. *The Lancet.* 1935. ii, 128.
Coryllos, P. N. and Birnbaum. 1928. *Arch. Surg.* 16, 501.
Lander, F. P. L. and Davidson, M. 1938. *British Med. Journal.* 1, 1047.

Sector News

Guy's Letter

THE changes of personnel among the students has been followed quickly by changes among the Residents. A general post with the sector hospitals and a shuffle among ourselves has set us on the road for the next three months.

We have bidden farewell to Mr. Guerrier who has left for the Southern Hospital and to Mr. Gerald Thomas and Mr. Chase who have gone to Farnborough. In their places we welcome Mr. Silas Clarke, Mr. Kynaston, and Mr. Moore. Soon, Mr. Stanham our President, leaves for the R.A.F., meanwhile he enjoys a bout of 'flu in Addison.

It is learned from a reliable source that the Matron's chickens have laid eggs at last. For some time it has been common knowledge that these fowls have made daily visits to the Light Department. Moreover, gossip says that the Superintendent's present holiday was taken to recuperate from the administration of a long course of endocrine therapy necessary to make the birds lay. Whether the ductless glands should be responsible for the word "foreign" stamped upon each egg is not yet known.

Last week Professor Ryle delivered an address on the "Physiology of Fear" in the Nuffield Nurses' Home. This week Mr. Layton will feature in an entirely new rôle when he speaks on "Reminiscences." R. T. H.

Farnborough Letter

HERE as elsewhere, the burning question of the moment concerns the provision of fire-fighters and fire-watchers. Considerable progress has already been made, and the Hospital now has its own motor trailer-pump. This is manned by teams of six who do duty by turns. Two of the teams are composed of students and the remainder of laboratory and various lay officials. A meeting has also been held to consider the requirements as regards watchers and it has been decided that ten of these must be on duty each night, so that seven teams will be needed to do a weekly spell each. Here again, the services of students are to be utilised, and thus the task of rota-clerk, which was never a sinecure, will now demand added resourcefulness in order to harmonise take-ins with fire-duties. Another fresh feature of the Hospital is a curious eyrie which recently appeared rather suddenly upon the roof of Chislehurst ward; at first rumour held that this was a hen-house which had been deposited there as a result of a bomb on a nearby poultry-farm, but it actually turned out to be the watch-tower of the new anti-fire brigade.

Certain members of the staff and students, who live out, are also taking part in schemes for the protection of houses in the vicinity. Dr. Brown especially has had greatness thrust upon him in this connection. He is the director of fire-watching in Croydon Road, and his front-door has become a centre of local life as there is posted upon it the roster of duty for his various neighbours. These fire - fighting schemes have, naturally, led to a good deal of fraternising among householders, and we were particulzrly interested to hear that in one area a young lady, in offering her services enquired what chance there was of sharing duty with one of " those nice medical students she had seen about."

Extra responsibilities of this kind must necessarily interfere with sleeping arrangements, but we feel especial sympathy for the two laboratory technicians who, when sleeping near their lab. in connection with transfusion work, were awoken one night at 3 a.m. by a junior nurse with a request for a sterile specimen bottle; the visitor, having met with a somewhat frigid reception, evidently felt that some explanation was due for she returned twenty minutes later to tell them that the bottle was not needed after all.

However, we feel that the value of prompt action in combating incendiary bombs was amply proved in the recent events at Guy's, and we hope that this re–ection will bring some consolation to those on vigil. To the same end we might close this "conte de nuit" with a reminder that at least one eminent person has found that medicine and astronomy make an excellent combination.

V. C.

Pembury Letter

We must bring to notice the activities of certain Pemburians, past and present. First our heartiest congratulations to Dr. R. W. B. Ellis (now R.A.F.V.R.) and Dr. Audrey Russell on their recent marriage. Next we express similar sentiments to Dr. Lindsay Neustatter (E.M.S., Duke of Tee Wells Own) on his engagement. Finally our congratulations to I. E. J. Thomas on acquiring an M.D. (Lond.). " Thoma " in his quiet unobtrusive way has been collecting an imposing string of qualifications and he has not come to the end yet.

This week Channing, Kreiser and McCall are leaving us, and as ever we regret at parting from old friends. In their places we expect to welcome Jones, Norris and Roberts. Departure of Residents always causes more regrets at a Base Hospital than it did in the formal pre-war days at Guy's, but as Tommy Trinder puts it, " When yer gotter go, yer gotter go."

The rest of the Staff continue to jog along in very happy fashion, and except for Prof. Nicholson, Dr. Osman and Reynolds falling victims to 'flu, there is little to report. We understand however, that a recent act by the Home Secretary has reduced by one the delivery of daily newspapers to the Orthopœdic Department, but in spite of this the high excellence of that Department's work continues.

That is the end of the Pembury Letter and it has been written by N. M. J.

"America Revisited"

By W. H. Ogilvie, Esq., M.Ch.

(continued)

The Inter-urban Surgeons whom I met last year at Montreal were holding a meeting at the Massachusetts General.

Allen talked about ulcers. In duodenal hæmorrhage operation is chiefly required in men over 50. Operation when a patient has bled much has a 33 per cent. mortality; it should only be undertaken either at once, or three to six weeks after the bleeding has stopped. After a week or so of repeated hæmorrhages operation is often demanded, but seems quite hopeless. " Something has gone from their blood and tissue fluids that cannot be replaced by transfusion."

Churchill gave a most scholarly talk on the detailed anatomy of the pulmonary lobes. He is working at segmental lobectomy in bronchiectasis.

A gynæcologist spoke of carcinoma of the ovaries. In 147 cases only 16 were alive five years later; of solid carcinomas 8.9 per cent. were alive; of papillary carcinomas 22 per cent. Ascites and even pleural effusion do not always mean a malignant tumour. Ravdin (Philadelphia) recently reported such a case, allowed to die; post-mortem revealed a myoma of the ovary. The operation should be bilateral oophorectomy with removal of uterus and cervix. Ovarian tumours are often bilateral, and metastasis to the uterus is very common.

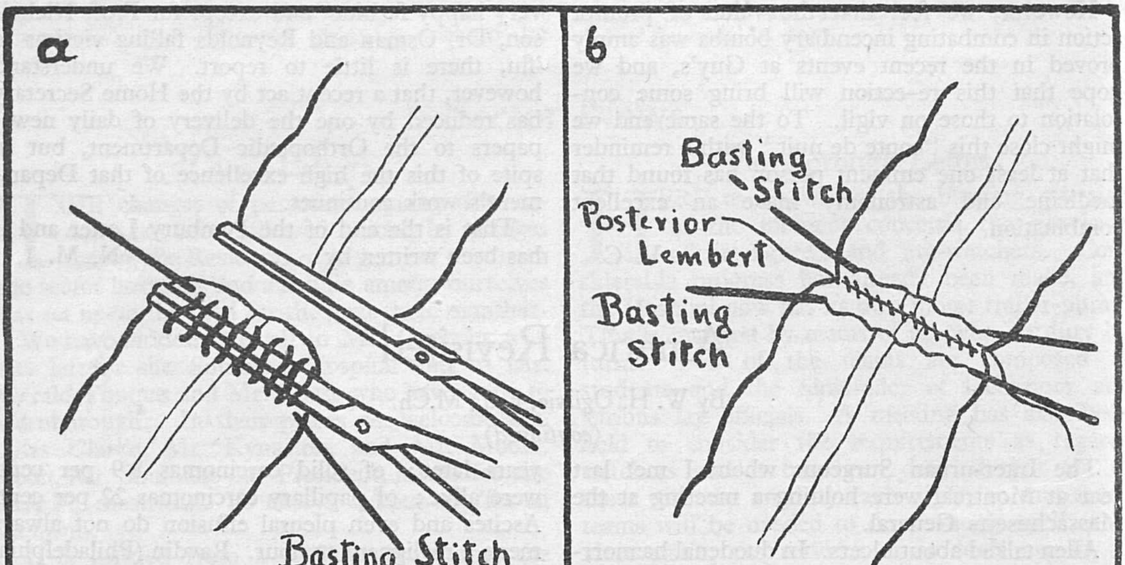
McKittrick discussed amputation for arteriosclerotic diabetic gangrene.

Of 100 cases who came with gangrene, 50 per cent. were dead in three years; of the others one-third have had bilateral amputation. The age of a diabetic may be reckoned as his actual age plus the duration of his diabetes: thus a man of 50 with 20 years' diabetes is 70. Safest operation is supracondylar amputation of thigh, as low as possible, using circular incision and closing completely. Below thigh amputation only justified when good popliteal pulsation.

The superintendent gave a talk, with models, on the new surgical block being erected. The land is reclaimed swamp, and they had much difficulty with foundations, having to start again with bigger and deeper concrete piles. At one period water appeared, and one morning he arrived to find a notice " No fishing," and a collection of ducks stained with eosin, brilliant green, bismark brown and methyl violet swimming around. The building is semi-skyscraper, bevelled to allow light to older buildings. The operation block has twelve theatres on one floor, restricted to sterile materials and sterile people. Above this is an observation floor with glass windows over theatres, but quite shut off; two-way microphones allow instruction and back-chat. It is interesting to hear that with general wards of 450 beds there are 300 semi-private and 100 private beds.

In the afternoon, a concert by the Boston Symphony Orchestra; in the evening, a dinner.

Next morning I infiltrated an abdomen for Allen. It went pretty well. He did the splanchnic, and that also worked, till he pulled on the œsophagus and had to bring in gas. The case was a large fungating carcinoma of the body and fundus, with no apparent involvement of outer coat and glands. He did a total gastrectomy by the method in his paper (*Annals of Surgery*, May, 1938, vol. 107, No. 5), which worked fine. He passes a Levine tube down the œsophagus at the beginning of the operation, and this is joined to a suction apparatus and left in throughout. After dividing and closing the duodenum, and freeing the curvatures by ligaturing the vessels on each, he detaches the left lobe of the liver from the diaphragm, and clears the œsophagus at the hiatus till 2 or 3 inches are brought into view. The Levine tube is then drawn up by the anæsthetist till its tip rests in the lower œsophagus, and keeps it clean and dry during the anastomosis. He then applies two pairs of right-angled clamps (like gall bladder forceps but more right-angled and a little longer) to the œsophagus and cuts between them. He brings up a loop of jejunum, and sutures it to the diaphragm behind the œsophagus, makes a small opening in its apex and sutures it to the œsophagus, removing one clamp at a time; and finally sutures the jejunum to the diaphragm in front. He then passes the Levine tube down to the distal jejunal loop, does an entero-anastomosis between the two loops, and a jejunostomy for feeding purposes lower down. He leaves the Levine tube in for five to seven days and feeds through it also. The right-angled clamps are essential.



The case had been peritoneoscoped first. Benedict showed the machine, on cystoscope lines. It has four essential parts :—

(1) A small blunt trocar, for inflating the abdomen with air.

(2) A large pointed trocar, through which the viewer is inserted.

(3) The light and telescope which looks forward, some 30 to 40 deg. from axis of telescope.

(4) A second telescope with nibbler, for biopsy.

They can see anterior surface of the stomach and liver, but cannot displace structures to any extent.

In the afternoon we saw the Army *v.* Havard football match.

It was a wonderful sunny day, and the ceremonial march in of the cadets behind their band, the ragging and antics of the cheer leaders, the army mules, and the " rag " mule taken on the field by Havard was great fun. The game was said to be the best there had been for years—for instance, one run of 80 yards to score from a kick off, and we saw plenty of open play and scoring; still it is small beer compared to Rugby.

We took the mid-day train to New York on Sunday, and saw the countryside, much of it blasted by the storm. After settling our rooms at the Waldorf we went to Radio City, supped in the Rainbow Room at the top, and went to the music hall afterwards. The rest of the week was a hectic rush, too much to allow me to take coherent notes or to remember clearly. Each day of the College of Surgeons' meeting followed roughly the same plan. Clinics at hospitals in the mornings; at 2.0 a series of grouped papers on some general topic, with further visits to hospitals as an alternative. At 6 o'clock an official dinner; and at 8.0 a " scientific session," *i.e.*, the more important papers or discussions in the large ballroom. (See the *Bulletin* appended.)

The informal conferences at mid-day were a first-class idea, and it might be well worth instituting something of the sort at the Association of Surgeons' meetings. They were held in smallish rooms, to seat about 100, the subject was a circumscribed one, somebody expert in the topic took the chair, introduced the subject, called on speakers, kept people to the point and finally summed up. There was a real attempt to make the talks informal, to encourage questions and answers, and to avoid lectures, figures and diagrams.

(To be continued.)

Correspondence

Lord Nuffield's Appreciation

The following letter has been received from Lord Nuffield, the Treasurer of the Hospital :—

My dear Superintendent,

I have now received a copy of the Deputy Superintendent's report of the extent to which the Hospital was involved in the intensive incendiary raid which was made on London on the night of Sunday, December 29th. This very informative report is abundantly convincing that had it not been for the prompt, courageous and admirable work of the whole of the resident personnel, the Hospital might easily have shared the fate of the majority of the premises surrounding it and have been seriously damaged, or perhaps almost totally destroyed.

I should be grateful if you would find a means of conveying to all members of the staff who were present at the time, my warmest and most appreciative thanks for their successful efforts, coupled with an assurance of the deep sensibility of myself and all those responsible for the welfare of the Hospital of the great debt that we owe to them.

Yours sincerely,

NUFFIELD.

The Superintendent,
Guy's Hospital.

We are pleased to publish this letter by Lord Nuffield; it is gratifying to know that the splendid work done on that memorable night has received such wide and important appreciation.—Ed.

" Trainees " in Pathology for the E.M.S.

To the Editor of the GAZETTE

SIR,—Firstly, may I correct certain factual inaccuracies in Dr. Shackle's letter published in your last issue.

1. It is not proposed to invite qualified men " of house-official status to become ' trainees ' in pathology for the E.M.S. at a salary of £200, nothing found." The remuneration of these members of the E.M.S. is still under consideration. I may add that the rather obvious reason for such men being of military age is that they are likely to be needed, after the necessary period of training, for military duties in this speciality.

2. Neither the pathology, nor the public health, laboratories established under the E.M.S. have any power " to commandeer all public health work at a flat rate of 3*s.* per specimen," or at any other rate. They have been organised for the help of local authorities, and the latter are quite at liberty either to use them or to make other arrangements if they so wish.

3. It is not correct to state " that the pathological work of private practitioners is also to be taken over." Private practitioners can continue to send their specimens where they like.

Secondly, may I make some brief general observations on the few remaining points in Dr. Shackle's letter. The large-scale evacuation of children and old persons made necessary by the War, together with the risk of epidemics resulting from interruption of necessary services, has presented, and continues to present, the Authorities with serious problems. It was to deal with a situation that had no parallel in peacetime, as well as to effect a decentralisation from such a vulnerable area as London, that the Medical Research Council in conjunction with the Ministry of Health organised a number of public health laboratories in various parts of the country. That their foresight was sound has now been shown. It is essential for proper public health bacteriological work that the forwarding of specimens and the return of reports shall be speedily and promptly carried out. For this to be feasible there must be either a rapid postal service such as is possible in peacetime, or a multiplication of laboratories to shorten the range of action of each to a degree which allows alternative methods of transport. Everyone with experience of the postal services in the London area in recent months will agree that the body concerned in the establishment of these laboratories was right in the decision it made.

Dr. Shackle's remarks about pathologists of his acquaintance who are at present inadequately occupied are too indefinite for profitable discussion. I can, however, assure him that the Ministry of Health would be glad to learn the names of well-trained men who are prepared to accept appointments in this speciality. Further, instead of the falling off in the need for clinical pathologists which he anticipates for the future, I feel sure that demand will rise as increasing numbers of clinicians discover how much more advantageous it is to have personal contacts with colleagues in pathology at work within the same four hospital walls than to depend merely on a postal service from a distance.

Lastly, it seems to me that Dr. Shackle, being accustomed to receiving work from a radius of 20 miles round Charing Cross, can hardly be surprised to find less work from 20 miles round Hayward's Heath.

Yours, etc.,

G. PAYLING WRIGHT.

Pathological Laboratory,
County Hospital,
Farnborough.

The Farnborough Letter

To the Editor of the GAZETTE

SIR,—I feel sure that the nursing staff at all the base hospitals will be grateful to V.C. for his letter from Farnborough in your last issue. We all realize that the aged homeless people must be cared for, but they should not be in an acute hospital with nurses in training looking after them. Is it not rather a question of distribution than accommodation? They are all accommodated at present, but why cannot they all be put into one hospital and the acutely sick into another?

Nurses who are not training for State registration (assistant nurses) could care for the aged. At present there are many assistant nurses working with the nurses in training in our so called acute hospitals.

Yours, etc.,

FLORENCE TAYLOR.

The County Hospital,
Farnborough,
Kent.

Sport

Rugby

Guy's v. New Zealand Army XV

(*At Honor Oak Park on Saturday, December 28th*)

THERE was a large crowd present to welcome the New Zealand Army XV and memories of the famous All Blacks were revived as this side settled down to give us as fine an exhibition of football as one could wish. There was not a weak spot in the side, and they excelled in their short passing, in which the forwards took a fair share, an occasional long pass to get their five-eighths on the attack, perfect handling and backing-up. Their movements were a delight to watch, and at times the Guy's defence was completely bewildered. Tindall at scrum-half played right up to his international reputation, always in the limelight, either by breaking away himself, making good use of the blind side, or maintaining the link between his forwards and five-eighths.

Guy's lacked the services of Strathie, Mullins, Gartrell and Wiggins; their deputies played well, but Guy's were outclassed against a brilliant all-round side and were only able to make a few spasmodic attacks, although every man played well enough to bring out all the best qualities in the New Zealanders.

Guy's had a good share of the ball from the scrums, bu they gained nothing, their three-quarters were never allowed to get away, and whatever movements were made mostly came from the forwards by foot rushes.

The game started with the New Zealanders attacking the Guy's line. The pressure was relieved by Scott making a kick to touch. A New Zealand player tried a drop which failed and a knock-on spoilt another chance. However, they soon took the lead through Solomon, a grand forward, and McClean converted.

Guy's played with determination and a forward rush took them to the other end. A three-quarter movement collapsed and Scott and Manning made a nice opening, but a forward pass robbed them of a chance.

The New Zealanders returned to the Guy's line with some delightful passing and a final short pass sent King over for a try which McClean converted. Handling the ball perfectly they swept down the field, this time with long passes, and eventually Parane raced over for an unconverted try.

Neighbours and Tindall added unconverted tries before the interval.

Following change of ends Guy's tried to make good use of the touchline, but were soon defending. From an attempted kick to touch from behind the Guy's line the ball sailed right into Parane's hands, who scored in the corner.

A great chance came to Guy's from a forward rush but in a desparate race for the touch-down a New Zealander was there first. Lewis, who had played an excellent game, fielded a high dropping ball and made a nice kick to touch under pressure, when Guy's were in danger. This was followed by some splendid handling by the New Zealand five-eighths, which ended in Parane scoring an unconverted try.

One of the best movements of the game came when Tindall sold a perfect dummy on the open side of the scrum and racing round the blind side, avoiding some feeble tackling, nearly reached the line before giving a perfect pass to Solomon for a try which Tindill converted.

Back came the New Zealanders, in spite of some vigorous Guy's tackling, and a fine passing movement sent Parane over for his fourth try and his side's ninth.

Manning looked all over a scorer when he cut through beautifully but preferred to kick ahead and the ball went straight to the full-back. Guy's solitary score came from a penalty kick taken by Kynaston in the closing stages.

Score: Guy's, a penalty goal (3 points); New Zealand Army XV, 3 goals and 6 tries (33 pts.).

Team.—T. L. T. Lewis; R. J. Forster, D. W. F. Charlton, R. U. F. Kynaston (Captain), R. F. Camp; F. R. C. Manning, N. J. Scott; J. P. Rochford, R. M. Sharpe, J. D. Everall, A. G. Albers, C. Vidot, D. N. Fuller, T. W. Renton, G. M. Evans.

Guy's v. Public Schools

(*At Honor Oak Park on Wednesday, January* 15*th*)

GUY'S paid the Public Schools the compliment of turning out a very useful side with eight recognised first team players. The conditions were atrocious with snow falling throughout the game, and the ball was more often than not caked with snow which made handling difficult. In spite of this, there were some very interesting exchanges, and at times play reached quite a high standard.

It was only natural that with such an advantage in weight Guy's were able to get the ball from most of the set scrums and this gave their outsides many chances of indulging in some nice passing movements.

The Public Schools showed up better in the loose, an outstanding feature of their play being the quick following up of their forwards who were always up with the ball. The three-quarters had few opportunities in attack, but their defence was excellent when called upon to tackle, which they did in determined fashion.

Manning opened the score for Guy's with a nice try which Mullins converted. Macrae-Gibson was placed in possession to increase the lead and Mullins converted. Before half-time Macrae-Gibson again went over but no goal points were added, giving Guy's a lead of 13 points to nil at half-time.

During the second half the Public Schools made some determined attacks mainly through their forwards and their efforts were rewarded when Hawes, a forward, scored a try, which Burbidge converted. Although tackling well the Public Schools could not stop Macrae-Gibson completing his hat-trick of tries, for Mullins to kick the goal.

The Public Schools kept hard at it and another forward, this time Burbidge, gave them a try which was converted by Herga.

Guy's kept the score going with a try by Camp and Mullins completed a good afternoon's work by kicking his fourth goal.

In the closing stages Davey, the Public Schools fly-half went over for an unconverted try, and this finished the scoring.

Score.—Guy's four goals and a try (23 points) Public Schools two goals and a try (13 points).

Team.—T. L. T. Lewis; A. C. Macrae-Gibson, H. R. Brangwin, P. C. Gartrell, R. F. Camp; F. R. C. Manning, N. I. Scott; J. D. Everall, R. M. Sharpe, T. R. Wooldridge, J. R. C. Matthews, M. R. Mullins (Captain), T. W. Renton, G. M. Evans.

Boxing

The Annual General Meeting was held on Thursday, January 30th, and the office-bearers were elected as follows : President, Mr. F. N. Doubleday, M.R.C.S., L.D.S. ; Secretary, G. R. W. N. Luntz ; Captain, A. A. Halamandres ; Vice-Captain, A. Albers ; Committee, Messrs. Lewis, Albers and Wooldridge.

The Boxing Club has been hard at work building up a team for the Inter-Hospital Boxing Championships, which will be fought off in the New Pavy Gymnasium, Guy's Hospital, on Wednesday, February 26th, but so far no recruits from Tunbridge Wells have made themselves known to us, and we should be pleased to welcome newcomers who are keen on taking their place in the ring.

We have been fortunate in securing the services of Matt Wells as trainer, and he will coach newcomers as well as members of the team on Monday, Wednesday and Thursday afternoons.

The Boxing Club in spite of many handicaps imposed by the War, is gaining popularity once more under the leadership of Otto Halamandres, and the several new members who have joined the boxing section will be able to avail themselves of the facilities afforded by the use of the New Gymnasium.

It is to be hoped that the ring used in training and for competition in Hospital boxing will be suitably padded on the flooring and posts.

Hospital Information, etc.

Pass List

ROYAL COLLEGE OF SURGEONS, L.D.S.

SECOND PROFESSIONAL EXAMINATION

December, 1940

Dental Mechanics

P. R. W. Boutwood
A. Brown
G. C. Christian
T. C. Collins
J. Elder
G. F. King
D. Middleton
R. Middleton
G. N. Pleasant
D. A. Reaney
S. B. Taylor

Dental Metallurgy

T. T. Billington
A. J. Bridge
J. C. Cox
D. C. Dawson
M. E. P. Easton
E. A. Glover
A. J. Goodwright
H. E. P. Grabaskey
P. C. Grummitt
P. C. Hanley
E. H. Harris
P. J. Hill
J. B. Kyle
K. G. B. Pritchard
J. S. Spencer
R. D. W. Stileman
D. E. Williams

Anatomy and Physiology

C. G. Bason
C. G. Chester
G. C. Christian
T. C. Collins
D. F. L. Cook
J. W. Coombs
P. C. J. Crisp
T. P. Dalton
A. J. R. Davies-Evans
D. R. Edwards
J. H. Farrell
D. T. Humphris
R. E. Hyman
A. C. Keith-Fraser
D. S. Nelson
J. P. Pearce
D. J. Rayner
J. K. Yerbury

Special Anatomy and Physiology

H. L. Bevan
G. L. Cocker
B. J. Dupree
J. R. Fleming
W. J. M. Hale
E. S. Jerichower
J. R. C. Matthews
W. L. Oakes
J. L. Watson
D. E. Williams

Papers by Guy's Men

Ellis, Richard W. B. Gargoylism. An addendum report of an additional case. *Arch. Dis. Childh.*, 1940, **84**, 215.

—Arachnodactyly and Ectopia Lentis in a father and daughter. *Ibid.*, 267.

Bradley, W. H. Problems in Shelters : The occurrences and Means of Prevention of Acute Epidemic Infection. *Practitioner.*, 1941, **146**, 38.

Hallpike, C. S., and Another. Observations on the Function of the Round Window. *J. Physiol.*, 1940, **99**, 76.

Denny-Brown, D., and Another. Experimental Cerebral Concussion. *Ibid.*, 153.

Broster, L. R. Feminism. *Brit. Med. J.*, 1941, i, 117.

Eckhoff, N. L. Actinomycosis of the Central Nervous System. Report of two cases. *Lancet*, 1941, i, 7.

Punch, A. Lisle. A note on the ætiology of Erythema Nodosum. *Lancet*, 1941, i, 10.

Witts, L. J. Analysis of Hæmorrhagic States with Snake Venom and Lecithin. *Brit. Med. J.*, 1940, ii, 862.

De Navasquez S. The Excretion of Hæmoglobin, with Special Reference to the " Transfusion " Kidney. *J. Path. Bact.*, 1940, **51**, 413.

Changes of Address

J. M. Brown, Lieut. R.A.M.C., Household Cavalry Barracks, Windsor, Berks.

S. W. Beales, Capt. A. D. Corps., 19 Casualty Clearing Station, R.A.M.C.

W. A. Steine, F/Office, R.A.F. (V.R.), c/o Lloyds Bank, Budleigh Salterton, Devon.

Marriages

WEIGALL—ROSEVEARS.—On October 17th, 1940, Anthony Fitzroy Weighall, Chaplain to the Forces, to Margery Roseveare, The Garth, Barnet Lane, Elstree, Herts.

Deaths

CHAPMAN.—On January 31st, 1941, at King's Somborne, Charles W. Chapman, M.R.C.P., late of 76, Wimpole Street, W., aged 97.

LANGDON.—Wm. Morgan Langdon, M.R.C.S., L.R.C.P., Capt. R.A.M.C. (T.).

PAUL—Frank Thomas Paul, Ch.M. On January 17th, 1941, at Grayshott, Hindhead, in his Ninetieth year.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *22nd February* 1941 *Number* 1372

PASSIM

IT is difficult, these days, bound up as we all are in this whirlwind of a war, not to reflect upon political and international matters. Our recent successes in Africa have done much to bolster up the morale and enthusiasm of the entire English-speaking world; not that we were not confident of ultimate victory, but this good news has helped lift us out of a kind of anxiety into a more good-humoured attitude towards the war and our leaders.

The immediate matter of importance seems to be the possibility of invasion. While it would be foolish to minimize this ever-present danger, it is just as unwise to continuously advertise it among the civilian population. Nothing is worse than fear of and worry about something we are powerless to control; there is now a large portion of evacuated civilians who have so magnified this dread that it has assumed the proportions of a mild hysteria which is both comical and unfortunate.

This island is now keyed up to a vast military machine. Our navy is still master of the seas and able to protect our shores, as well as bring raw and manufactured materials from the rest of the allied world. The Royal Air Force has distinguished itself time and again, and as its numbers swell, so air mastery is assured. In addition, our vast army is strategically disposed throughout the country, building up communications, acquiring more and more equipment, taking part in large-scale manœuvres and training new officers and men. In point of fact, the British Isles is now an intensely fortified arsenal with supply bases constituting the entire British Empire and the United States of America.

Against this worldly combine of power stands Hitler and his now defunct ally, Mussolini. Between them they hold sway over nine-tenths of Europe, with the Japanese forming a background menace in the East. It is very easy for any of the dictators to walk into a so-called neutral country and in a matter of days impatiently cast about for the next victim. While these countries are often quite wealthy in material resources and in area often several times that of England, they may be placed in the category of a herd of cows completely submissive to a boy with a stick and a barking dog. The British Lion is a much more fierce proposition, and if Hitler and all his cunning had not thought so, he would have certainly attempted an invasion last May and June. Now he must wait until he has swallowed and digested all of Europe, until he has broken our growing strategic hold in the Middle East, until he can cut us off from our sources of supply, until he can defeat our navy and prove himself superior in the air, then only can he consider an invasion of Britain. If this be true, then all these steps and processes must and will take time; thus while the populace must be alert and always prepared for such a prospect, there is absolutely no need to alarm them with ill-conceived propaganda.

◆

THE authorities of the E.M.S. have adopted a very wise procedure, namely, that of issuing various memoranda on several important topics such as shock and burns. This is a good way of bringing these matters to the notice of its different officers, matters which otherwise might have gone unobserved and be lost in one or other of the medical journals. However, unless and even if the entire pathology and physiology of a certain subject be known, one is treading on dangerous ground when discussing in a dogmatic fashion its *treatment*; this is emphasized all the more when anyone from an endocrinologist to a laboratory pathologist writes on surgical procedures and treatment for the presumed benefit of surgeons with the highest qualifications and widest experience. In order to avoid such embarrassment, it seems advisable to add the authors' names to such memoranda, the circulation of which is really advantageous.

It would be wise to advise diabetic patients to have inscribed on the opposite side of their identity discs the words "diabetic" with required daily Insulin dosage and caloric intake. Should they become casualties, this slight precaution might well save themselves and their attendant medical staff a great deal of inconvenience.

The Index for Volume 54 (1940) is now ready for distribution and may be obtained free of charge on application to The Manager, "Gazette" Office, Guy's Hospital, S.E. 1.

Subscribers who have not already sent their subscription to the "Gazette" (12s. 6d. post free) are reminded that it is now due.

Obituary

FRANK THOMAS PAUL, Ch.M., D.Sc.Liverpool, F.R.C.S.

Frank Thomas Paul, Ch.M., D.Sc. L.Pool, F.R.C.S., who died on January 17th, was born in 1851 and entered Guy's Hospital in 1869. He qualified and held house appointments at Guy's before proceeding to Liverpool, where he enjoyed a successful career as a surgeon at the Stanley Hospital, the Royal Southern Hospital and the Royal Infirmary. Although he had retired in 1912, he was recalled during the Great War to serve as a major, R.A.M.C. (T.F.) at the first Western General Hospital. Mr. Paul played a great part in the growth of the medical school at Liverpool, both as an administrator, holding the post of Dean of the Medical Faculty for seven years, and also as a teacher. As a surgeon, he was renowned both for his knowledge of surgical pathology and also for his skilful technique. His name will always be remembered in connection with the surgery of the large bowel, and Paul's tube is world-famous. On his 75th birthday, his colleagues at the Royal Infirmary published a volume of selected papers from his writings. We are proud to remember that he trained at our hospital as a student, and are pleased to know that his last years were spent in happy retirement.

Psychoneuroses and other Mental Conditions arising out of the War

By R. D. Gillespie, M.D., F.R.C.P., Physician for Psychological Medicine, Guy's Hospital; Wing-Commander, R.A.F. (V.R.)

The causal factors in the production of psychological breakdown in war, whether among civilians or in the Services, can be divided in the traditional way into the predisposing and the precipitating, or the antecedent and the immediate. The predisposing factors are constitutional, which in the mental field means temperament; and it means also upbringing, including education and discipline, which determine character. At the present stage of the war, which for most people is still an early stage, it is the predisposing factors that are in most cases the important ones. A working knowledge of the types of heredity and of temperament which predispose to mental breakdown is not difficult to acquire. The predisposing causes, apart from these, are exhaustion, often largely due to loss of sleep; and motivation in the form of a more or less repressed desire to escape from the battle through illness. The precipitating causes are *traumatic* — physical (bodily injury) or psychological (fright or a harrowing experience). Oddly enough, bodily injury is rarely accompanied by important psychological symptoms, at any rate judging from wounded combatants in the last war. The reason was partly that the existence of bodily injury produced exemption from further service and freedom from danger, at any rate for the time being; so that the few who might have been possessed of a powerful desire, conscious or repressed, to escape, did not find it necessary to have symptoms that would have coincided with the desire.

Injury to the brain is a special matter, since the symptoms of this condition are themselves of a psychological order, although not *mainly* caused psychologically—as headache, forgetfulness and lack of concentration. The task then is to determine how far these symptoms are the results of injury to brain tissue, or the result of uneasiness of mind—anxiety about the possible consequences of the threat to one's livelihood; or the desire to exploit the fact of having been injured.

EXHAUSTION

War gives doctors an unequalled opportunity of observing the effects of exhaustion. Real exhaustion is rare in peacetime, *pace* the advocates of " nervous exhaustion " as a clinical entity. But in war, long marches or long vigils, with little sleep for days or weeks on end, are the common lot. Opportunities for observing the effects of prolonged deprivation of sleep are likely to be considerable, with the persistence of night bombing. An enemy may possibly achieve more by depriving the population of sleep than by inflicting wounds and death from aerial bombing. Hence (in my view) the crying need for deep shelters, since sound sleep is only possible where there is a sense of security, and this only deep shelters can give in these times. Noise is not the thing that keeps people awake. It is the knowledge or apprehension of danger close at hand. It is already a fact that many people have learnt to sleep well through the noise of an A.A. barrage—and the noisier it is, the deeper they may sleep because of the sense of protection thus conveyed. It reminds one of Pawlow's principle—that any response may be linked to any stimulus. A dog trained in the Pawlowian manner can develop sleep in response to noise, and so apparently can humans.

MOTIVATION

The motive of escape from duty has cropped up in this war mainly in new recruits, so far, and in elderly recruits unwillingly recalled. The resulting symptoms are of the ordinary types—anxiety psychoneurosis and hysteria. But they have not been frequent; although the war has produced a revival of gross hysterical disabilities, which, in peace time of recent years, have been a diminishing phenomenon—whether as the result of the better education of the people, or of doctors, or both, I do not know. One almost regrets the comparative rarity these days of hysterical paralyses. They are so much easier to cure than psychoneurotic anxiety states—at any rate, for a time.

MENTAL TRAUMA

Much the more important and frequent type of psychological trauma is that of fright, *i.e.*, acute apprehension of immediate personal danger. Harrowing experiences, such as the sight of others wounded, appear to be much less important. The majority of those who develop symptoms following fright are predisposed people (*v. infra*). On the other hand, those who react with psychoneurotic symptoms to fright without apparent predisposition are an interesting technical problem; but they are a practical problem as well, since we do not at present know how to predict their behaviour; whilst many of the predisposed might conceivably be eliminated from the fighting by psychiatric examination on recruitment.

AMONG CIVILIANS

It was suggested, before the war began, that even with the kind of air raid implied by " total " warfare, civilians would not be so prone to develop war neurosis as some expected, partly because, being under no constraint as a rule to remain at a given point, they would lack the motive of escape into a " war neurosis " in the vulgar sense. A foretaste of what might be expected was seen at the time of the Munich débacle, when the threat of war brought a few people to out-patient departments or to consulting rooms. The clinical appearances consisted in the elderly usually of depression, and in the younger people of states of psychoneurotic anxiety. In both types, predisposition was clearly evident, and the total was small.

TYPES OF PSYCHOLOGICAL PREDISPOSITION

(a) *Psychoneurotic.*—Actual warfare does not appear to have produced any considerable increase in the quantity of mental illness among civilians, and those cases which have developed have nearly always been in the mainly predisposed. Reactions of the psychoneurotic type have appeared in those who already showed a considerable array of psychoneurotic characteristics, which can be summed up under the headings of " timidity " and " anxiety." The outstanding predisposing traits of this kind appear to be nervous habits in childhood, such as nail-biting, bed-wetting and sleep-walking; morbid fears, *e.g.*, of the dark, existing in a pronounced degree; highly developed anticipatory anxiety, *e.g.*, inability to sleep before some important event, with excessive emotional or visceral responses both to anticipation and to actually disturbing situations (*e.g.*, the sight of blood); and lack of enthusiasm for enterprises or even for games involving risk of bodily damage.

(b) *Psychopathic.* — Psychopathic personalities are also, as might be expected, prone to breakdown under stress. Their previous existence has usually been marked by relative failure in life, especially by a frequent change of job, which is the readiest indication of that lack of persistence in anything which is so characteristic of psychopaths.

(c) *Obsessional.*—There is a special group of people who are prone to develop anxiety and who, under continued stress, tend to develop symptoms. They begin to wake too early, to feel very low-spirited, especially in the mornings, and to find everything an effort. Concentration, even on a book, and still more in writing letters, is very difficult. They tend also to become emotional, weeping without sufficient reason. This group is characterised at best by excessive conscientiousness, which reaches what is called an "obsessional" degree, *i.e.*, their conscientiousness surpasses anything useful, and becomes a kind of tyranny to them. Even such small things as locking up the house at night have to be repeated a number of times to make sure it has been done properly. Overwork, resulting from war conditions (especially long hours without a holiday) is a genuine factor in such people, since they transmute ordinary work into overwork.

(d) *Psychotic.*—Those predisposed to psychotic breakdown of the schizophrenic or manic-depressive variety may respond to the stress of war as to any other stress by developing the the reaction inherent in them. But war does not seem to produce much increase in the incidence of these illnesses. When they do occur under war stress they tend to be more recoverable than in peace time. Henderson remarked in the last war that schizophrenic psychoses in the troops seemed to occur, as he put it, at a more superficial level, and so to follow a milder and more transient course. In so far as civilians may be exposed to such stresses as imminent and lasting physical danger, or what is a stress for potential schizophrenics, submission to communal life, *e.g.*, in shelters, which is anathema to them—because of the constant personal adjustments that have to be made, when they above all things desire to be left alone or nearly alone—similar brief episodes may be expected in them, too. Where, however, the stress is of the more ordinary kind (*i.e.*, living in a civilian population under war conditions with infrequent air raids), evidence from the last war tends to suggest that there is no notable increase in schizpohrenia or in manic depressive illness.

It is to be expected that the devastating experience of a bombardment will produce in some people acute reactions of a sort not seen in peace time (except in countries where overwhelming physical disasters like earthquakes occur). These acute reactions are likely to be of the nature of wild panic—extreme and aimless restlessness, with all the appearance of terror; or, on the other hand, of immobility (Rivers' "sham-death" reaction) resembling stupor, but accompanied sometimes, according to my observation, by intense preoccupation with the danger of falling bombs, etc. Again these are likely to occur in the predisposed in the anxious sense already described. In the more acute type of panic, movements are almost entirely undirected; in less acute states of panic fear, the patient is likely to enter a fugue—he will be found perhaps miles away from where he started, professing a loss of memory, which may be genuine to the extent that passing impressions have been so blurred during the fugue as to make recollection difficult. In acute panic, actual mental confusion can occur, from nearly complete failure to comprehend the environment, and the resulting amnesia is genuine.

AMONG TROOPS

The aggregate number of cases of breakdown has so far been very small, partly because the majority of those enlisted have seen little or no active service of the prolonged kind. Neglect of the lessons of the last war, when mental defectives proved such a bugbear to the Army, has allowed the enlistment of a considerable number of men who are feebleminded. These could for the most part have been eliminated by clinical psychiatric examination on recruitment; they are of no use as front line troops, and the value of hewers of wood and drawers of water of such poor calibre under active service conditions is more than doubtful. Nevertheless it is recorded that one chairman at least of a recruiting board has been under the impression that the Services wanted defectives!

These can hardly be called psychiatric casualties of the war; they are casualties rather of the recruiting system. The majority of the psychiatric casualties in the true sense of illness arising *de novo* from war conditions have been, as with the civilian population, among the predisposed. Hysterical reactions of a gross kind have not been common, and appear to have been more frequent among recently joined recruits, intellectually and temperamentally defective, than among those who have been in action with the enemy. These hysterical reactions have occurred mostly in young psychopaths who have never done satisfactory work in civil life, or defectives, or in middle-aged reservists who disliked leaving their families and their comfortable jobs, to return to Service life, usually on considerably less income, and with less comfort than they had in civil life.

Hysterical fugues have occurred in a few instances among those exposed to enemy action; their disposal raises a new administrative problem, since some of them are mere malingering, and call on the one hand for disciplinary treatment, on the other hand for medical assessment of the reason for their behaviour and how far it has depended on predisposition or the operation of causes not connected with the war itself, and how far on lack of morale.

Fatigue played a considerable part in precipitating psychoneurotic conditions among the Dunkirk troops. The commonest psychogenic symptoms were of the psychoneurotic-anxiety type; hysterical symptoms were rarer. A few cases are said to have presented a resemblance to a Parkinsonian picture—with relatively immobile faces, and a coarse tremor, even in one case (according to Sargent and Slater) a typical pill-rolling tremor differing from the latter only in that it could not be controlled voluntarily for a short time. This is a peculiar and interesting observation. Amnesia for distressing experiences has not been as common as would have been expected from the literature of the last war. Most remember the terrifying episodes with complete detail.

It is not to be expected that the recovery of memory for the forgotten events by hypnosis or allied means will have the effect of producing more than a symptomatic cure; it is doubtful whether most men who have met a war experience by developing a hysterical amnesia will face combat successfully in the future. Indeed, this promises to be one of the medical lessons of the war, that in any well disciplined force, psychiatric casualties (" shell-shock " as it was formerly and unsuitably called), apart from mental defectives, are almost exclusively although not entirely among those temperamentally predisposed, especially the " constitutionally timid." Mark the reservation, however, " well-disciplined." A great responsibility rests upon the M.O. of a unit in helping to maintain morale, partly by ensuring that a visit to him does not come to represent an easy escape from duty.

TREATMENT

Discussion of his experiences, in a frank manner, once they have been recollected, helps to " desensitise " the patient. Sympathy, consisting largely in the provision of an opportunity to " talk it over," with tactful reminders of where duty lies, may be enough. Hysterical amnesia should be tackled by persuasion, hypnosis, or narcosis (*e.g.*, by evipan or sodium amytal) in that order, if the method first tried is not successful. Symptoms generated under one's eyes must be treated promptly. An injudicious medical remark may perpetuate an otherwise transient symptom. For the more acute states of distress continuous narcosis has been used, with apparently good effect in tiding the man over the period of more profound emotional disturbance; but it is often sufficient to use sedatives less drastically and for a shorter time, than is implied by continuous narcosis. A hypnotic, especially a barbiturate, in full pharmaceutical doses is sufficient in most; while in acute panic, where a very rapid effect is desired, a hypodermic injection of morphia (gr. 1/4) and hyoscine (gr. 1/100) may be best.

In the civilian population the general principles of treatment are the same. But in this case, a predisposed person whose services are not useful to the war effort where he is domiciled, should be removed to a more peaceful neighbourhood. Those who are useful may be given sufficient support to continue at their job, although in most cases the success of this will be regulated by the intensity and frequency of exposure to air raids. Also it is to be hoped that there will be no pensions available for breakdown of the motivated escape-from-duty type arising from war stress, whether among troops or civilians.

Notes on War Injuries of the Spinal Cord and Cauda Equina

By H. R. Harley, Esq.

THESE notes on injuries of the spinal cord and cauda equina will embody lectures by Professor Lambert Rogers, Sir Alfred Webb-Johnson and Dr. J. Duncan White. Many of the remarks on the bladder functions, and in particular on the treatment of the urinary complications, will be based on the views of Sir Alfred Webb-Johnson.

Damage to the spinal cord is almost always associated with injuries of the vertebral column. In war time, especially under the conditions of modern mechanised warfare, injuries to the latter are of two distinct types:—

1. Closed injuries, similar to those seen in civilian practice, and sustained as the result of aeroplane crashes, parachute descents, motor transport accidents, or crushing injuries due to falling masonry.
2. Open injuries produced by missiles, such as bullets, shell fragments, and bomb fragments.

The closed injuries usually involve the lower cervical and dorsi-lumbar regions, and are due to flexion violence in well over 90 per cent. of cases. As in civilian practice, they take the form of dislocations and fracture dislocations, and will not be further considered here.

Open injuries produced by missiles characteristically take the form of depressed fractures of the neural arches, and fractures of the spinous and transverse processes, often accompanied by severe damage to the overlying muscles, and by pressure upon the cord or cauda equina by depressed lone fragments or by the missile itself. This pressure is of great importance, for it embarrasses the local circulation of the spinal cord, resulting in œdema and hæmorrhages, and unless quickly relieved will result in cord softening, gliosis or meningeal adhesions, which will greatly increase the severity of the original lesion.

A missile which damages the spinal column is very liable to penetrate the thoracic or abdominal cavities, resulting in severe or fatal injuries to the structures lying therein. Many of these patients die upon the field of battle. A missile traversing the body transversely may involve the spinal column and both kidneys. Such a catastrophe is rapidly fatal.

Open injuries due to metallic foreign bodies are usually not associated with the loss of stability which characterises closed fracture-dislocations and dislocations, and the problems of transport are therefore not of such vital importance in the former as they are in the latter.

As with injuries elsewhere these wounds may be of the through-and-through variety, or may take the form of penetrating wounds with a retained foreign body of greater or lesser size. Such a retained foreign body may be lodged in the soft tissues, in the vertebræ, or in the spinal canal. A foreign body partially embedded in a vertebra soon becomes surrounded by a shell of bone which makes removal difficult. If it is embedded in the vertebral body no harm to the cord is likely to result, but if it is situated at the junction of a pedicle with the body, a very common site, the new bone laid down is often extensive and frequently produces spinal compression at a later date. Such a foreign body should, therefore, be removed at once.

A foreign body which penetrates the subarachnoid space may sink downwards in the latter under the influence of gravity. It is, therefore, important to take X-ray pictures of the lower portions of the spine if the foreign body is not visualised in the first pictures taken.

Damage to the spinal cord or cauda equina may result from the missile gaining a direct hit on the theca, or from in-driven bone fragments, or as the result of the concussion produced by a missile travelling at high velocity close to the spinal column without actually striking it. The latter type of injury is especially likely to occur if the foreign body strikes a rib, for a severe shock is then transmitted to the vertebral column, and from the latter to the spinal cord.

TYPES OF LESION WHICH OCCUR IN THE SPINAL CORD AND CAUDA EQUINA AS THE RESULT OF INJURY.

1. *Spinal Concussion.*—Spinal concussion is characterised by a complete loss of all spinal functions, of instantaneous onset, and transient duration, following an injury. The condition may or may not be complicated by a destructive lesion of the cord, and, therefore, the condition will be discussed under two headings—uncomplicated concussion and complicated concussion.

Most writers stress the fact that spinal concussion is a condition which is entirely different in ætiology from cerebral concussion. A study of the features of concussion as seen in the brain, spinal cord and peripheral nerves, however, reveals a striking similarity in their symptomatology, and suggests that they are comparable conditions. The hall marks of each are complete loss of function arising immediately upon the receipt of an injury, and followed, after a relatively short time, by complete recovery. Greenfield suggests that concussion is due to a sudden stretching and deformation of nerve fibres. This theory can equally well be applied to the brain, the spinal cord or the peripheral nerves, and if correct would bring the three conditions into ætiological alignment. It should be stated that the above deductions were not made by any of the lecturers referred to at the beginning of this section.

Uncomplicated concussion is not accompanied by a destructive lesion of the spinal cord or cauda equina, and is therefore completely recoverable. There may or may not be a bony injury of the vertebral column; often there is not. The passage of a high-velocity missile near the spine is sufficient to produce concussion, probably due to a blast effect. If the missile strikes a rib, or a transverse or spinous process, concussion is especially likely to occur, as a severe shock is then transmitted to the spinal cord. The condition sometimes follows a heavy fall upon the back, or forced flexion of the neck, as may occur in diving, without any injury being sustained to the vertebral column.

There is complete paralysis with flaccidity and loss of all reflexes, and anæsthesia, involving only the lower limbs, or all four limbs, and the trunk. There is retention of urine with overflow incontinence, and retention of fæces. The blood pressure is low and the patient very shocked, for the sympathetic functions are in abeyance. Recovery is usually complete in twenty-four hours, and almost always within four or five days, but occasionally the symptoms persist for two or three weeks. It is very dramatic to witness a man completely paralysed in all four limbs, flaccid and anæsthetic, and suffering from retention of urine and fæces, following upon a comparatively minor injury, who, the following day, has recovered completely, and has perfect control over his limbs and sphincters.

Complicated concussion is the condition usually referred to as spinal shock. The characteristic features of concussion appear at and below, but not above, the level of a destructive lesion of the spinal cord. The higher the animal is placed on the ladder of evolution, the more complete and persistent is the condition. In the human adult the effects of concussion are very marked. Recovery of reflex function commences in from seven to ten days, and is usually complete in from three to four weeks.

The cessation of spinal functions below the lesion is complete, but if the latter is high—for instance, above the mid-dorsal region—some reflex activities sometimes persist in the lowest segments of the cord. Thus the anal and bulbo-cavernosus reflexes and the plantar response may be present. The latter if present is flexor. If the plantar response is absent it usually reappears in from seven to ten days. It is always flexor at first, but soon becomes extensor if the pyramidal tracts are damaged. The knee and ankle jerks reappear in from three to four weeks, while automatic micturition is established in an average of two months.

Spinal concussion is an important condition for it masks the effects of cord damage in the early days, and renders the assessment of a case of cord injury quite impossible when the patient is first seen. In many cases the true damage cannot be ascertained until the lapse of about three weeks.

2. *Compression.*—Compression of the spinal cord is very rare in closed injuries, but is more common, and more important, in the case of open injuries for the reasons outlined above. It may be due to œdema, hæmorrhage, depressed bone fragments or a missile. Œdema is probably the commonest cause, and when the condition is due to this, or to hæmorrhage, the symptoms are characteristically delayed for twenty-four hours, and after appearing they tend to spread in an upward direction. It has already been mentioned that any pressure on the spinal cord embarrasses the local circulation, resulting in œdema, and also in the production of small hæmorrhages. This œdema spreads upwards and downwards for several segments. The downward spread will give rise to no clinical manifestations because cord functions below the site of compression will already be in abeyance, but the upward spread will do so. Thus, the level of root pains, anæsthesia or paralysis may rise. In cases of spinal compression root pains usually appear first, and are followed by paralysis and then by anæsthesia, if the compression is of relatively slow onset; but it should be remembered that in traumatic cases the compression is of sudden or rapid onset, and that its characteristic features are usually obscured by the associated laceration and concussion which are almost certain to be present.

3. *Laceration and Contusion.*—No useful purpose is subserved by separating these two conditions, which differ in degree rather than in kind. A localised bruise, as seen elsewhere in the body, rarely occurs in the spinal cord. The so-called contusion takes the form of small capillary hæmorrhages, and œdema which spreads for several segments. Nerve fibres must also be ruptured at the same time in many cases, and secondary degeneration is common, resulting in permanent impairment of function.

In open injuries destruction of cord substance is usually due to the impact of a foreign body, or of indriven bone fragments, while in closed injuries it usually results from the deformity associated with dislocations and fracture-dislocations of the spine. In the latter type of accident the cord is nipped between the lower margin of the lamina of the vertebra above and the postero-superior margin of the body of the vertebra below.

4. *Hæmorrhage.*—Hæmorrhage may be extra-dural, intra-dural or intra-medullary. The latter variety, the commonest, is known as hæmatomyelia. All forms are rare, and in the World War of 1914-18 so rare was hæmatomyelia that it was almost unknown. This was thought to be due to the young age of the patients.

In hæmatomyelia the hæmorrhage always occurs into the grey matter, which is more vascular and more friable than the white matter. The anterior bone cells are destroyed, resulting in flaccid paralysis with loss of reflexes, and the pain and temperature fibres crossing in the white commissure are soon involved by pressure, so accounting for the loss of pain and temperature sensation. Later the pressure may involve the pyramidal tracts, producing spastic paralysis below the level of the lesion, but the posterior columns are characteristically spared.

Extra-dural and intra-dural hæmorrhage give rise to early irritation of the posterior nerve roots resulting in root pains, and in the case of intra-dural hæmorrhage the blood tends to gravitate to the bottom of the lumbar lake, causing irritation of the roots of the cauda equina.

The hæmorrhage in hæmatomyelia occurs at the site of the lesion when the latter is due to a missile, but in the closed injuries produced by flexion violence it almost always occurs in the cervical region, irrespective of the location of the bony injury.

Reviews

Surgery of Modern Warfare," Parts 2 and 3. Edited by Hamilton Bailey, compiled by sixty-five Contributors. Published by E. & S. Livingstone, Edinburgh. *Price* 12*s*. 6*d*. *each part*.

PARTS 2 and 3 of this latest surgical work follow closely upon Part 1, and it may be said at the outset that the material contained in them is more interesting, and on the whole more stimulating, than that of the first Part. The publishers maintain the high standard set in Part I, a standard which has been characteristic of all their recent surgical publications. When the work is completed the bound volume will be handsome and attractive. The editor continues the difficult task of collating the articles of his many contributors and whilst he has succeeded in avoiding the expression of conflicting opinions to a greater extent than in Part 1, there is evidence of injudicious pruning of some sections at the expense of including matter of doubtful value in others. The text, for the most part, is good and clear, but with an editor noted above all things in his personal writings for clarity of expression, it is surprising that such a cumbersome sentence as "Plurivisceral damage augments mortality; multiregional injury determines a heavier death-roll" should have unworthily escaped the blue pencil.

All the disadvantages of a work compiled by many authors are evident in the two Parts under review. Foremost among these is the subdivision of intimately related topics between an unnecessary number of authors. A glance at the title pages of some of the individual sections gives one the impression that surgery is composed of a number of watertight compartments, each with its own specialist: in fact one almost envisages the appearance in the book of the specialist for each separate quadrant of the abdomen and possibly even of the right leg specialist as distinct from the left leg specialist. In war surgery of all subjects, it is scarcely necessary for one surgeon to describe the methods of entering the abdominal cavity, for a second to deal with injuries of the stomach and small intestine, a third with the large intestine, and a fourth with the rectum. Nor does it seem essential that two authors should be required for a chapter on post-operative abdominal complications consisting of less than two and a half pages. The various regions of the urogenital tract are divided between four specialists, whilst no fewer than eight authors contribute to the section on wounds of blood vessels. In this section the heparin specialist vies with the maggot specialist of a former section for pride of place as ultra-specialist. An entire section is devoted to methods of immobilising the limbs; two surgeons describe the methods of application of extension, and five the use of various splints, Cramer wire and plaster of Paris. Individually most of these articles are excellent, but it would be difficult to read the section with an unbiassed mind and to know at the end the best method of immobilising a limb. In the yet uncompleted section on wounds of bones and joints, we find separate contributors for the hip, knee and ankle joints; it is, nevertheless, consoling to realise that one author alone is considered capable of dealing with all the joints of the upper extremity.

In Part 2 Mr. Tudor Edwards gives an admirable account of wounds of the thorax. Abdominal wounds are able dealt with by a number of contributors, and it is satisfying in this section to find due stress laid upon the importance of avoiding resection of bowel whenever possible and of providing adequate drainage for the extraperitoneal tissues in wounds of the colon and rectum. Injuries of the kidney, bladder, urethra and scrotum are described by different authors; these chapters are good, but could have been expanded to advantage. Two chapters by Major John Bruce on the exposure of the main vessels of the limbs are outstanding. The need for adequate exposure of the vessels is stressed and to this end the classical approaches are discarded in favour of those of Fiolle and Delmas. These excellent anatomical exposures are beautifully illustrated and the indications for their use, with full operative details, are well described. An article on the use and misuse of tourniquets covers a frequently neglected subject. More detail, however, might have been included on the time periods for which tourniquets may be safely applied and on the safe sites for their application; in this latter respect Fig. 201 is particularly dangerous in showing a band-tourniquet in use at a site where the musculo-spiral nerve is most vulnerable. Wounds of the blood vessels and traumatic aneurysms are adequately dealt with in a section which continues into Part 3. The chapter on secondary hæmorrhage is disappointing in many respects. The writer properly insists that secondary hæmorrhage is usually arterial in origin, but does not emphasise the dangerous size of artery commonly involved. In controlling the hæmorrhage he eschews the use of an ordinary tourniquet on the ground that viability of the limb is in danger, and advises the use of a pneumatic bag over a pad; if this is to control arterial hæmorrhage it must surely still deprive the distal segment of the limb of its blood supply. Moreover, the application of the complicated apparatus depicted in Fig. 240 would be quite impossible in an emergency; it should be a well-known fact that the single-handed application of any tourniquet is frequently impossible in these circumstances. Proximal arterial ligation is damned with unjustifiable dogmatism and exploration of the wound for the bleeding point advocated; the dangers and difficulties of this procedure are not adequately described and there later occurs the gravely inconsistent statement that in the majority of cases the bleeding vessel cannot be located on local exploration.

Part 3 continues with splendid accounts of injuries to peripheral nerves and tendons. The treatment of nerve injuries deals only with the later stages of operative interference; for completion a discussion of the methods of dealing with injured nerves in recent wounds should be included. Six chapters are devoted to methods of immobilising the limbs. The methods of applying extension to the limbs, the use of plaster of Paris and the uses of Thomas's various splints and frames are well described. Mr. E. I. Lloyd is evidently a partisan of the Braun splint and many authorities would not agree that its use can be applied so widely as he suggests, particularly for fractures of the neck and shaft of the femur. The use of Cramer wire as a first-aid measure in the treatment of fractures is described at unnecessary length; its use, as shown in the diagrams, for fractures of the humerus and tibia and fibula does not provide any immobilisation worthy of the name. A great stretch of imagination is required to find it necessary to use a Cramer wire cage to cover plaster windows or to construct a Cramer splint for use on the arm during blood transfusions. In days when the importance of the functional position of the hand is so well appreciated it is disappointing to find the use of a Cramer wire banjo splint recommended for compound fractures of the fingers. The important chapters on wounds of the hand and foot are admirably dealt with and here we see illustrated the rational method of treatment of compound fractures of the fingers. The section on wounds of bones and joints commences at the end of Part 3 and the injuries of the lower limb joints are clearly expressed. The section will be completed in Part 4, which is in active preparation, and the volume as a whole will be completed in five or six parts.

S. H. W.

Essentials of General Anæsthesia. By MACINTOSH AND PRATT. Blackwell, Oxford. *Price* 25s.

THIS book on anæsthetics deals with the subject from a new angle, namely, the theory and practice as illustrated by anæsthesia in dentistry. Not only have the authors shown the great advance made in the technique of the much-neglected art of giving a dental "gas," but also use each stage of the progress as the subject of chapters on anæsthesia in general. The book is essentially one of technique and not a description of various instruments and machines; the many illustrations in colour are original, and not just reprints from instrument maker's catalogues.

The book should be of particular interest to housemen, resident anæsthetists, all dental students and to any general practitioner who considers he is good at giving a "whiff of gas." As the book is a departure from the routine textbook, a rough idea of the contents and scope will be given, so that the reader may judge for himself in how far it answers his requirements.

The account of the history of anæsthesia is short, interesting, and not too overburdened with dates. Patients often embarrass the anæsthetist by asking when "gas" was discovered, or demur when he advises what they consider newfangled drugs such as avertin or evipan; a brief knowledge of this first chapter is a help in gaining the confidence of such patients.

The chapters on the theory of anæsthesia, respiration and cyanosis explain, with the help of diagrams why it is that although the plethoric borough labourer must be "blue" if he is not to feel his tooth extraction under nitrous oxide, the anæmic patient in bed in the medical ward will die of heart failure long before cyanosis occurs. Coloured drawings of the patient's face under varying proportions of nitrous oxide and oxygen greatly simplify the text, and compel the reader to master the few mathematical considerations involved.

Two chapters on the signs of anæsthesia follow, the first dealing with drugs which are powerful enough to produce respiratory arrest such as ether and chloroform, and the second with nitrous oxide. The latter explains why the signs of anæsthesia as seen during a major operation in the theatre do not seem to apply when giving a nasal gas in the dental department.

Premedication, both for ambulatory and bed patients, is considered, and the advantages of the various routes of basal anæsthesia are compared. A detailed description of the use of penthothal given to a patient in the upright position in the dental chair is good, and from personal experience the use of this technique will reduce the number of failures in "finding a vein." While it is stated that a dental prop should be placed in the mouth before the pentothal is given, the authors have omitted to mention that unless maintained in position by the dentist or other third person there is considerable risk of it falling out before anæsthesia is established if the patient talks or yawns.

The use of ethyl chloride and vinesthene by the open and closed methods are described, but the technique of the repeated small doses of the former is not likely to be acceptable to the majority of anæsthetists. Chapters on nasal nitrous oxide administration in the chair follow, and are full of practical tips. No description of the many anæsthetic machines such as the McKesson, Walton, or Magill is given, for unless the operator can give a satisfactory anæsthetic using a simple apparatus of cylinders, bag and nosepiece, he is unlikely to succeed with a more complicated device when his attention is diverted from the patient to the dials and gauges. Advice is given, however, on how to open the mouth of a patient with trismus without damaging the teeth, how to make a patient breathe through the nose, and above all, how to assist the dental surgeon actively by maintaining the jaws in the most suitable position, and passively by keeping out of his way.

The chapter on endotracheal anæsthesia is one of the best in the book, and the illustrations of the reason for failure to pass the tube blindly or to see the cords with a laryngoscope are original and helpful. When considering the care of the unconscious patient the authors stress the dangers of the period when the vomiting reflex returns. Rather than use a Mason's gag as in the illustration on page 255 it is an advantage to insert a solid rubber mouth prop before the patient attempts to vomit or clenches his teeth from spasm. The writer has seen a patient in this stage of recovery from anæsthesia grind the teeth together, and dislodge a gold inlay before a mouth gag could be inserted. In the chapter on respiratory obstruction the X-ray photographs of the position of a barium-coated tongue being controlled by the movements of pulling the mandible forward are excellent, and those of the position of the mandible when the patient is seated in a dental chair serve to stress the importance of careful adjustment of the head-rest before starting the anæsthetic. Further chapters on emergencies, analgesia, reducing valves and the medico-legal responsibilities of the anæsthetist bring the book to a conclusion.

Enough has been said to show that the authors have met in practice all the complications that are likely to arise when giving anæsthetics for dental surgery, and that from their experience they have written a most helpful textbook.

W. S. M.

The Pathology of Internal Diseases. By WILLIAM BOYD, M.D., M.R.C.P. (ED.). Published by Messrs. Henry Kimpton, London. *Price* 45*s*.

THIS excellent text book now appears in its third edition—it deals primarily with Medical Pathology, but as is bound to occur there is a certain amount of overlap with Surgical Pathology—in fact it really constitutes a fellow volume to the author's text book on Surgical Pathology.

It is profusely illustrated with photographs and microphotographs of pathological specimens, all of which are beautifully produced.

One of the chief attractions of the book is the way that the author correlates pathological changes with the symptoms and physical signs that they produce, a fact of extreme importance to the student, who in attempting to learn Medicine will find it considerably easier if the underlying pathological states are clearly understood.

There are also numerous references at the end of each chapter.

This book is not only excellent for reference, but also makes very pleasant reading in times of relaxation.

W. B. D. M.

Law for Nurses and Nurse Administrators. By S. R. SPELLER. Publishers Messrs. H. K. Lewis & Co., Ltd. *Price* 10*s*. 6*d*.

THIS book should go far to fill a gap which has been known to exist in the publications available for the instruction of Nurses in Training. It is comprehensive, technical expressions and the usual stilted form of legal terminology are excluded as far as possible in a book dealing with law, and many of the more difficult explanations are amplified by brief but clearly stated hypothetical cases which explain any ambiguity which may otherwise exist.

If the syllabus of an average Nursing School is examined it will be found that lectures by the Hospital Medical Staff and instruction by the Sister Tutors are given almost to the point of spoon-feeding the pupil in such subjects as Anatomy, while usually no provisions is made for instruction in such necessary legal matters as the National Health Insurance Acts and the Workmen's Compensation Acts, let alone equally important but less obvious matters such as the Law of Master and Servant.

Matrons and Sister Tutors would be well

advised first to read this book seriously and then to consider whether or not the pupils in their Schools are being adequately instructed in those legal matters a knowledge of which is necessary for all Nurses. It is not suggested that a detailed study of all the subjects dealt with is essential or even of advantage, but a general knowledge of matters of more common interest, a knowledge that other legal enactments exist, and, in addition, that a book of reference is available in case of difficulty or doubt, would doubtless be of the greatest value to every Nurse and might be the means of averting considerable trouble and expense.

It cannot be too strongly emphasised, however, that in cases where trouble or dispute have arisen expert advice and assistance should be sought. No text book can take the place of the experienced Solicitor, but a knowledge of the matter contained therein may avert an error of commission or omission, the occurrence of which would necessitate consulting a Solicitor.

A place should be found for this book in the personal library of every Nurse who intends seriously to pursue the profession she has adopted. It will well repay study, and even a relatively casual reading will probably impress upon the memory a general outline of many matters which should be known, although it is possible that a Nurse commencing to read the text, and appreciating the personal application of the information given, will become interested and give the book the study it deserves.

As a work of reference it should prove invaluable, particularly to those occupying the more senior positions in the Nursing world.

B. L. R.

Sector News

Guy's Letter

As they lay low the old familiar surroundings and leave their hideous memorials of rubble, the demolition squads working in the Borough are letting the daylight into Guy's and we are fast taking on the appearance of a cottage hospital. But we do miss the friendly and revolting smell of drying hops.

Now that the number of influenza cases taken in has diminished, it is hoped earnestly that Addison may soon resume its role as a male surgical ward.

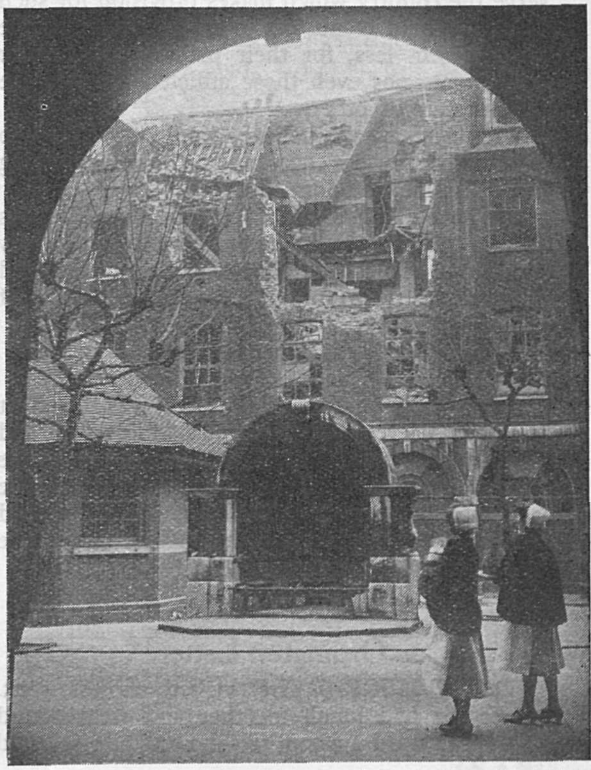
The Acting Superintendent's unfortunate accident which has delayed his return to the Hospital has aroused both our sympathy and our curiosity by virtue of the cause and more particularly of its site. The arm-chair generals have discarded their maps of Europe, and discussing the treatment of burns, now draw a multitude of diagrams depicting the patient in some sort of primitive Balkan frame. It is hoped that the Superintendent's return will be marked by a clinical lecture on " How on earth it happened and did it hurt much ? " Of course, many wiseacres have their theories about both, But the resuscitation unit declare they have never known similar cases in the treatment of fluid loss.

R. T. H.

Pembury Letter

THE problem of the chronic and senile patient, which we first raised in the " Pembury Letter " about a year ago, now appears to have become acute in other parts of the sector. We must in fairness add that the position at Pembury has been considerably eased by a masterly piece of strategy (not here to be divulged) performed by Dr. Grasby some time ago. However, we would like to add our remarks to the controversy now raging in these pages.

Firstly, let it be generally recognised that



By kind permission of Topical Pres

through the fortunes of war, the available accommodation for these patients in Kent has been sorely reduced. The nearer the coast one lives the more conscious of it does one become. Secondly, the nursing staff available to attend to this type of patient is very small. The crux of the matter is therefore nursing, as well as accommodation. How can these shortages be rectified?

With regard to accommodation. As some of the patients are ambulant, and none require complicated treatment, there is no need for hospitalisation. We suggest that all boundaries be swept away, and that suitable houses, irrespective of what county or sector in which they stand, be taken over. As a long-term plan huts should be erected in the grounds of such houses. Now for the nursing. First we suggest that assistant nurses, volunteers and a minimal number of trained nurses be set aside to attend to the females. As at present there are a good many assistant nurses attending males, their transference to females would make the ratio of nurses to patients more equitable. For the nursing of the males we suggest the present small nucleus of male orderlies augmented by a minimal number of male nurses. To these we would add the considerable number of Conscientious Objectors, using compulsion, if necessary. Many people respect the motives of a true "C.O.," but none believe they should fail to serve the country which makes provision for such views. There is no job to which these people could object less, for their patients are neither belligerents nor even those afflicted through the belligerency of others.

This system, we believe, would do much to alleviate the present chaos, and certainly something must be done, and done soon.

We have now completed our local War Weapons Week, and the expected figure was handsomely exceeded. To achieve this there were dances and whist drives in profusion. Also an exhibition of those things that

> "Droppeth as the gentle rain from heaven
> Upon the place (Pembury) beneath."

Most remarkable of all, however, was the effort of Sister Grieves, who managed by fair means and foul, to extract the sum of £800 17*s*. 6*d*. from the various inhabitants of the hospital. Your scribe is now endeavouring to find out who subscribed the bulk of this sum, in order that he may strike up the closest of friendships.

N. M. J.

Orpington Letter

PROFESSOR RYLE visited us last week. We had lunch together and went round the wards, where we showed him selected cases. Early discussion was concerned with some of the elusive diagnoses in medicine, such as is rheumatic pneumonia; but, a mysterious jaundice brought us face to face with a practical problem. We learnt that obstruction from a gall-stone could occur with the absence of pain, so that, as there was little evidence to suggest there being a growth, a laparotomy was thought advisable. Later, a soldier was shown with a gunshot wound of the skull. He was making good progress against the triple alliance of aphasia, alexia and agraphia; we hoped that he would return to his job as a mechanic, and this led to the Professor remarking that treatment should not be considered ended until the patient was able to resume some occupation, a new one being learnt if any permanent disability made it necessary. After the war there would always be use for E.M.S. hospitals, which, if discontinued as such, could be converted into "rehabilitation centres." We enjoyed this afternoon and hope that it is only a prelude to further meetings.

The present epidemic of 'flu has ravaged our nursing staff. Sister Gale, who has been in her element in Fagge, the orthopædic ward, is laid up again, and both of the theatre sisters have succumbed to it, thus disproving the hyperbolical statement of the daily press that use of the face mask prevents the common cold and "all other forms of infection." We sympathise with them, and with the nurses who are off sick. The standard of Guy's has been well maintained by them, who are also responsible for the high morale in the wards during the blitz. We lament that their living conditions are not better. In part this is due to the war, but not entirely. Their food is one of the chief problems, and surely, if improved, would lead only to better health and wellbeing.

We have had to bid farewell to Clarke and David Roberts, and we welcome Messrs. Epps, Manning and Cox.

C. F. H.

Guy's Hospital Gazette

(ESTABLISHED 1872)

Editorial and Publishing Office — THE COUNTING HOUSE, GUY'S HOSPITAL, LONDON, S.E.1.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who **does not accept responsibility for the views expressed by contributors.**

Correspondence

Trainees in Pathology

To the Editor of the GAZETTE

SIR,—Without wishing to prolong what seems likely to be an unprofitable discussion, may I be permitted to say that Professor Wright's letter seems only to suggest that the wording of my original letter might perhaps have been slightly different.

To take his last point first, I may perhaps point out that to have set up as a private pathologist in such a town as this would have been like ordering a plate of oysters in the hope of finding a pearl to pay for them. That Professor Wright writes from Farnborough does not mean that only pathology of interest to him is that of its inhabitants, and I can assure him that I still go up to town as many days in the week as the small remnants of the practice (now unremunerative) will warrant. But these are only debating points, and the real crux of the matter is the perhaps rather unfortunate use on my part of the word "commandeer" (though I can assure Professor Wright that some of the letters to hospitals and local authorities that I have seen have almost amounted to this). Professor Wright says that the local authorities and practitioners are free to choose who does their pathology. I was careful to point out in my original letter that no laboratory that stood on its own legs could possibly compete with those working at a flat rate of 3*s*. per specimen—the actual cost price being much nearer to double this amount. It is therefore not in the least bit surprising that (a) the local authorities, who are eager to keep down their rates, have jumped at the offer and are likely to be followed by the medical practitioners, though these are having to pay more. (b) That the E.M.S. laboratories, having got the contracts they wanted, are now finding that the 3*s*. per specimen is inadequate, though they cannot now repudiate these contracts. The loss must therefore be made good by the Treasury (complaints of this inadequate remuneration have been received by the B.M.A.). Against such subsidised activities there can be no competition, especially when it is noted that the E.M.S. laboratories pay no postage, even specimens being sent in franked envelopes. In these days such postage is a substantial part of the cost of each specimen. But, according to Professor Wright, these laboratories are designed expressly to avoid transmission by post. No doubt that was intended, but I assure him that in many cases to my knowledge specimens are still not only sent by post but are sent to much greater distances than previously.

Professor Wright's suggestion that the trainees will be of value in their pathological capacities after joining the Services is also a surprise to me, as also his remark that the Minister of Health will be glad to learn the names of well-trained men who would accept appointments in this capacity. My own name and that of one of my colleagues of even longer experience has been in their hands for over two years, and they have been repeatedly reminded of it in vain; I have a letter from an E.M.S. chief saying that "there is a glut of pathologists."

Finally, while not quarrelling with the extension of the pathological services, I am still unable to understand why this was not done by "supplementing existing facilities and not supplanting them" (to re-quote Sir A. S. McNalty).

Yours, etc.,
J. W. SHACKLE.

Hospital Information, etc.

Notice

The Society of Apothecaries of London Examinations for March are as follows:—

Surgery: March 10, 12, 13.
Medicine, Forensic, Medicine and Pathology, March 17, 19, 20.
Midwifery: March 18, 19, 20, 21.

Changes of Address

G. N. Wood, Capt. R.A.M.C., No. 1 Company, No. 3 Special Service Batt., c/o A.P.O.

R. W. F. Brotherton, Capt. A.D. Corps, 52 General Hospital (420), c/o A.P.O.

P. Hack, F.R.C.S., 122, Union Park Gate, Pretoria, S.A.

Appointments

Ian R. Vermooten, M.R.C.S., L.R.C.P., to be Physician Superintendent, Grahamstown Mental Hospital, South Africa.

Births

McDONALD—On November 19th 1940, at Capetown to Dr. and Mrs. Robert McDonald (*nee* Dr. Conie Wiese)—a son.

THOMPSON—On January 26th, 1941, to Jessica, wife of Allan Thompson—a son.

Marriages

JOHNSON—JOHNSTON. On 8th June, 1940, at Fort Beaufort, South Africa, D. A. H. Johnson to Voreda Elizabeth, younger daughter of R. Bathgate Johnston, Esq., F.R.C.S., F.R.C.P.Ed., of London.

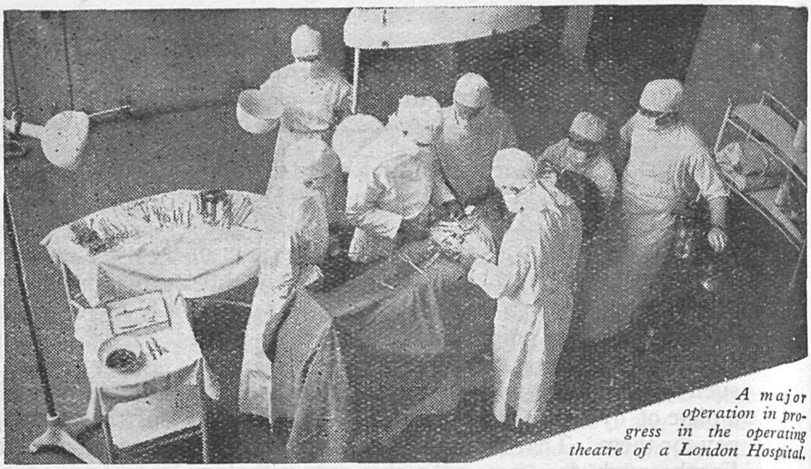
Deaths

FRYER.—On February 8th, 1941, at Walcot, Shanklin, Charles Fryer, L.R.C.P., M.R.C.S., aged 86.

TICEHURST.—On 17th February, 1941, at the Royal East Sussex Hospital, Hastings, Claud Buchanan Ticehurst, M.A., B.C., M.R.C.S., L.R.C.P., F.R.G.S., of Saxon House, Appledore, Kent.

EDS. {N.A.N.
B.S.L.

DEGREES OF PROTECTION...



A major operation in progress in the operating theatre of a London Hospital.

One of the most essential requisites at any operation is—surgical cleanliness. On it may rest the life of the patient.

Protection against bacterial infection plays no less an important part in everyday life—particularly in the life of the nurse. Of course, such elaborate precautions as those taken in the operating theatre are not practicable in everyday hygiene; but it is possible greatly to reduce if not entirely remove the chances of infection by washing regularly with Wright's Coal Tar Soap. Leading bacteriologists are agreed that Wright's offers an effective protection against most forms of infection. They advocate its regular use for everyday hygiene.

Wright's Coal Tar Soap has enjoyed the confidence of the medical profession for over 70 years. Today, more doctors use it than any other brand of toilet soap. Wright's has substantial antiseptic and antipruritic qualities, and is the only soap in the world to contain 'liquor carbonis detergens,' the valuable skin therapeutic used and recommended by the foremost dermatologists in the country. You can use and recommend Wright's Coal Tar Soap with confidence.

WRIGHT'S COAL TAR SOAP

The SAFE *Soap*

Wright, Layman & Umney Ltd.,
44-50 Southwark Street, S.E.1

CAMBERWELL HOUSE
33 PECKHAM ROAD - - LONDON, S.E. 5
Grams: "Psycholia, London." Phone: Rodney 4242 (2 lines)

For the Treatment of Mental Disorders

Also completely detached villas for mild cases, with private suites if desired. Voluntary Patients received. 20 acres of grounds. Hard and Grass Tennis Courts, Putting Greens, Bowls, Croquet, Squash Racquets, Recreation Hall with Badminton Court, and all indoor amusements, including Wireless and other Concerts. Occupational Therapy, Callisthenics and Dancing Classes. X-ray and Actino-therapy, Prolonged Immersion Baths, Operating Theatre, Pathological Laboratory, Dental Surgery, and Ophthalmic Department. Chapel. Shock and also Modified Insulin Therapy.

Senior Physician, Dr. HUBERT JAMES NORMAN, assisted by a resident Medical Staff, and Visiting Consultants. An illustrated Prospectus, giving fees which are strictly moderate, may be obtained upon application to the Secretary.

The Convalescent Branch is HOVE VILLA, BRIGHTON, and is 200 feet above sea level

EPPING HOUSE LITTLE BERKHAMSTED NR. HERTFORD, HERTS.

An attractive and comfortable PRIVATE HOME. Beautifully situated in its own grounds, 400 feet above sea level. Exceptionally healthy air and position affords every facility for convalescence. Foam Baths, Billiards, Squash Racquets, Lawn Tennis, Croquet, Bowls, Farm Produce, &c.

Treatment for Ladies and Gentlemen suffering from Insomnia, Functional Nervous Disorders, Alcohol and Drug Habits, Chronic Heart and Kidney Diseases, also Convalescing Cases.

Telephone: Essenden 212 - *Apply:* J. C. BAKER, M.B.

DUCHY HOUSE CLINIC
HARROGATE

Primarily a centre for *investigating obscure illnesses*: well equipped for the investigation and treatment of rheumatic affections, diabetes and diseases of the blood and alimentary tract. The services of a full consulting staff are available. Inclusive fees for investigation.

For Brochure apply Secretary. Telephone: Harrogate 3872

PAVAEX
PASSIVE VASCULAR EXERCISER

SUCCESSFULLY PROMOTES MORE RAPID RECONSTRUCTION OF GANGRENE TISSUE, INDOLENT TISSUE, Etc.

Write for details to:

SHORT & MASON LTD. Aneroid Works London - E. 17

INCOME TAX
HARDY & HARDY
TAXATION CONSULTANTS
49, Chancery Lane, W.C. 2
HOLBORN 6659
and at 9, CHALGROVE ROAD, SUTTON, SURREY. *Vig.* 5535
"YOUR BURDEN IS OUR BUSINESS"

The 1941 Edition of our ANNUAL PRICE LIST OF SETS and PACKETS is now available and contains offers of Packet Collections, Special Collections, Sets of Postage Stamps, British Empire and Foreign, classified into countries in alphabetical order, special offers of Miniature Sheets, Air Mail Stamps, Air Mail Errors, Air Mail Covers, Air Mail Packet Collections and Collectors' Outfits. This List is indispensable to every keen collector and if you wish to secure a copy we shall be pleased to send you one free for the asking, provided you enclose a 3d. stamp to cover the cost of postage. Established 1869

Whitfield King & Co. (G.G.), Ipswich, Suffolk.

APPEAL TO GUY'S MEN.—Urgently required by Officer-in-Charge Ambulance Organisation H.G. (Guy's Man). Articulated and Dis-Articulated Skeleton for demonstration purposes. Gift or Loan. W. R. Rowland-Hill, 206, Mitcham Road, S.W.17.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry
and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *8th March* 1941 *Number* 1373

PASSIM

THE opportunity afforded by the continued lull in night bombing has been utilised for a detailed survey of the medical problems of shelter life. Many problems have been energetically tackled, and although the dangers of overcrowding, improper nourishment and the spread of infection persist, there is no evidence to suggest that the health of the people as a whole has been in any way undermined. It is a relief to turn for a while to the consideration of problems, less directly connected with the present emergency; thus, the interest aroused by the recent decision of the British Medical Association to nominate a medical planning commission seems to be widespread. Unfortunately, the more vocal portion of the comment seems to be uniformly condemnatory, and it is instructive to consider some of the reasons proposed for this opposition. They appear to be largely based upon the very reasonable fear that an admittedly non-representative body will, if only in virtue of its name, present opinions that will carry much more weight with the general public and with Parliament than the organisation that they represent does with the remainder of the medical profession. This is rendered all the more certain by the fact that the members of the commission are not only able men, but also men of public repute, and there is every reason to suppose that the views that they come to express will be sound and logical. To what extent such men can appreciate the viewpoint of the bulk of the profession, the general practitioners, the " also rans " when matters of weight are to be decided, but the " backbone of the profession " when it is wished to flatter them, is a very different matter, and the cause of much unnecessary discord. The prospect must indeed be faced of different practitioners' unions and other organisations each setting up a commission of their own, to give expression to their own idea of the trends which medical reorganisation should follow after the war. It is possible indeed to envisage rival bodies presenting their opposing views to a select committee of the Commons, hurling abuse at each other, the one side, drawing freely from modern literature, holding all specialists to be robbers or quacks, and the latter replying with lurid stories of fivepenny dispensaries undercutting sixpenny ones and other tricks that dishonest practitioners have employed before now. There is, to be serious, quite a possibility that if the time should come when Parliament should ask for the views of the medical profession upon the need for and means of the reorganisation of the health services of the country, then the views expressed might be far from unanimous. As a result, there is a danger of the arbitrary introduction of a system of State medicine which while presenting both the best and the worst features of the Civil Service, might possess very few of the advantages of the present system of medical practice, be it private or consultant. The first objective of a medical planning commission must be to decide ways and means of improving the health of the country; in the last event this health depends upon the work of the general practitioners and never upon that of the medical officers of health. Their viewpoint is one of great importance, but medical men are curiously individualistic in their ways; the first great step that this commission might achieve would be the establishment of a system whereby all the great wealth of information and ideas that are available could be recorded, sifted and receive due recognition. If some more or less permanent organisation could be built up, a miniature medical parliament, wherein all shades of medical opinion could gain real recognition, then there would be some more solid background upon which to attempt to build for the future.

A second great point of criticism that has been raised is that since a large proportion of the flower of the profession are in the Services, no commission which might conceivably be taken to represent the medical profession should be established unless it contains an adequate representation of Service members; this criticism carries with it greater weight for the fact that the modern medical service provided in the Forces does provide an example of State medicine applied to deal with a large number of men, and as such must be studied, though not necessarily followed, in any future planning. Another point raised is that it is doubtful whether it is possible to justify the creation of a commission planning for the future during the present phase of the war; the production of any realistic plan for the re-organisation of the medical services throughout the country under unknown post-war conditions is an arduous task and a whole-time one. The cost in brain power of this must be enormous and yet there are innumerable problems of medicine and medical organisation during war-time that still require attention. To mention only a minor point, often raised before, we still see ward after ward in hospitals between London and the Kent coast that are chock a block with chronic patients, cripples, infirm or simply senile; most have settled down to hospital life for the remainder of their days, few mind where that hospital may be, yet they are left with us, to block the beds in an emergency and to block the road with ambulances in the event of hurried evacuation. The duties of civilian and hospital doctors in any area of invasion have not been clearly defined as yet. Again, the present controversy over the treatment of burns is now stated by eminent authority to have resulted from the incorrect use of tannic acid by inexperienced operators; this is a point that could and should be rapidly decided. It is, however, probably very desirable that the opportunity afforded by the war should be used for the review of the health services of the country, and the presence of a ready made plan, generally acceptable, will be a necessity to help to curb the inevitable excesses of post-war reform. It is encouraging to know that some of the best brains in the profession can find time to apply themselves to this task, and their suggestions, when formulated, will at any rate merit the respectful attention of all.

Basal Narcotics

A Clinical Lecture delivered at Guy's Hospital by A. D. Marstan, Esq., M.R.C.S., L.D.S., D.A.

(*Reprinted by kind permission of Editor of " Medical Press and Circular "*)

THE outstanding feature in modern anæsthesia has been the introduction of basal narcotics.

These have been used with progressive frequency during the post-war period, and have secured a well-deserved popularity with surgeons, anæsthetists, and the lay public.

Perhaps their greatest contribution to modern medicine is their effect upon psychic trauma. Induction of anæsthesia in an operating theatre, and transport thereto, had always produced a good deal of apparent or concealed fear and apprehension in the patient.

With the aid of basal narcosis this ordeal is reduced to a minimum, and patients are better able to withstand the effects of surgical shock.

Induction of anæsthesia is also rid of any struggling and its attendant strain upon the respiratory and circulatory systems.

A third advantage is the fact that nitrous oxide gas and oxygen will often be sufficient to complete the balance of anæsthesia.

It is a distinct advantage to maintain anæsthesia by these means, because nitrous oxide and oxygen has the virtue of being the least harmful of anæsthetic agents.

This is only true if nitrous oxide is given with enough oxygen to supply the metabolic needs of the body. In conjunction with a basal narcotic it is possible to administer nitrous oxide with adequate percentages of oxygen, and also to secure a more tranquil and relaxed anæsthesia.

Another advantage is post-operative quiet, the patient remaining in a sleepy state for some hours.

These advantages have created a new era in anæsthesia, which is now rid of its former terrors; and it is a notable fact that patients who have had a basal anæsthetic do not, as a rule, dread a repetition of the experience.

The basal narcotics are not universally applicable; with the exception of paraldehyde they all lower blood pressure, depress the respiratory centre and render the reflexes of the upper respiratory tract less brisk than usual.

Thus in wasting diseases, asthenic states, abnormally low blood pressure, and in those operations requiring a quick return of the laryngeal reflex, basal narcotics must be used with caution.

In operations where much blood loss or surgical shock is expected, only part of the normal dose is given.

The effects of shock are increased in deep basal narcosis, and recovery may be retarded.

This is often due to depression of the respiratory centre, and if pulmonary ventilation is inadequate, sequelæ such as massive collapse or hypostatic congestion may occur.

Careful nursing is required after basal narcosis, so that any symptoms of respiratory failure may be dealt with promptly.

A clear airway is essential, and may be secured by insertion of an artificial airway, nasal catheter, or by traction on the lower jaw.

If cyanosis should occur in the presence of a free airway, a mixture of carbon dioxide 7 per cent., and oxygen 93 per cent. should be administered.

As an alternative, there are a number of drugs, which may be given hypodermically or intravenously, according to the urgency of the symptoms.

Possibly the best of these are the analeptic aqueous solutions of camphor derivatives known as Coramine and Cardiazol.

These are proprietary drugs, and their exact pharmacology remains a little obscure, but clinically they are undoubtedly efficient. In serious cases they may be used in large doses of from 5 to 10 c.c. at a time. Other injections are Icoral (Bayer) and Alpha-lobeleine; these may be used as alternatives.

Combinations of pre- and post-anæsthetic medication with basal narcotics may lead to cumulative drug action.

It is well to remember the hypothesis of Burgi, which states: " Drugs having the same pharmacological action summarise their therapeutic effect when given together, but drugs of different pharmacological actions increase their activity to an extent far greater than the sum of their action, when given separately."

Thus the routine administration of large doses of pre-anæsthetic drugs is to be deprecated, and post-operative medication should be withheld until the major effects of the basal narcotic have definitely waned.

Cases of fatal overdose with basal narcosis are fortunately rare, and an examination of the records of such reveals the fact that the basal narcotic *per se* is not usually the deciding factor but one of the following :—

1. Too great pre- and post-operative medication.
2. The superimposition of sudden, massive or prolonged surgical shock.
3. Lack of good nursing and treatment during the post-operative period.

Basal narcotics are numerous and may be divided into three groups :—

Group I.—Avertin.
Group II.—Paraldehyde.
Group III.—The Barbituric derivatives :—
(*a*) Amytal sodium.
(*b*) Nembutal.
(*c*) Sodium soneryl.
(*d*) Pernocton.
(*e*) Evipan sodium.
(*f*) Sodium pentothal.

The basal narcotics are administered in one of three ways :—

1. By the mouth.
2. By the rectum.
3. Intravenously.

The route by which each drug may be given has a considerable influence upon its choice.

With such a wealth of narcotics available, each with special merits, it is a mistake to use any particular agent as a routine. Each case should be considered separately and the best choice made.

GROUP I

Avertin—CBr_3CH_2OH (Tri-brom-ethyl-alcohol).

This is a white crystalline substance which, mixed with amylene hydrate, forms the avertin fluid in common use.

The precise mode of manufacture of avertin has not been published; it is a " trade secret," but is known chiefly to consist of the reduction of bromal with yeast.

One c.c. of the fluid contains 1 gram of avertin, and the dose ranges between 0.08 and 0.12 gram per kilogram of the body weight. The average or " Bayer standard dose " is 0.1 gram per kilogram body weight, except in obstetric practice, where a proportion of .075 gram per kilogram is usually employed.

Reliance on the weight rates will not give the best results; it is necessary to examine the patient, and only experience will enable you to find the optimum dose.

As a general rule, young people need more than old, fat people require less than thin, and nervous subjects take more than those of placid temperament.

In wasting diseases, where extensive dehydration of tissues has occurred, the weight is a fictitious one, and it is usual to give a dose not exceeding .08 c.c. per kilogram of body weight.

In obese subjects, it is seldom necessary to exceed the 0.1 c.c dose for 12 st. 2 lbs., *i.e.*, avertin mm. 130 in 308 c.c. of distilled water.

Avertin is usually dispensed by a pharmacist, should be freshly prepared and supplied for use in a vacuum flask. The mixing of avertin fluid with distilled water is simple but needs care, if two errors are to be avoided. If the distilled water is too cool, the avertin fluid will not dissolve, but is precipitated as a crystalline deposit.

On the other hand, the water must not be heated beyond 40 deg. C., lest the avertin be decomposed with formation of dibromacetaldehyde, even slight traces of which will cause damage to the epithelium of the bowel and much pain and discomfort to the patient.

There is an obligatory test, and this consists of the addition of two drops of a 1 : 1000 aqueous Congo red solution to 5 c.c. of the 2½ per cent. avertin solution. The resulting colour must remain bright orange red. Improperly-made solutions turn the colour dull to blue, and must be discarded.

Administration.—The patient is placed in the left lateral position with the head comfortably placed upon a pillow. The avertin is slowly poured into a funnel attached to a small rubber catheter, which after lubrication is inserted not more than 4½ ins. into the rectum. Three-quarters of the dose are given slowly over a period of six minutes. If the patient sleeps during the next ten minutes no more avertin need be given. If sleep is not produced, the remaining portion of avertin is given. This technique is an improvement on the routine administration of the whole dose, as it avoids too deep a basal narcosis, and allows greater range for the maintenance anæsthetic.

Most patients go to sleep without excitement or distress, and the experience is described as a pleasant one.

Respiration becomes more shallow than normal, blood pressure falls 10 to 15 m.m. of Hy, and the pulse rate increases.

Narcosis reaches its maximum in about 30 minutes and will continue in a diminishing degree from two to four hours.

The conjunctival reflex is absent, but the corneal is usually just present. Bloomfield has pointed out that if the corneal reflex be absent the patient is not usually in a stage of surgical anæsthesia; he will move and his musculature become rigid if stimulated.

Avertin is excreted by the kidneys after detoxication by combination with glycuronic acid (Endoh).

Avertin is antipyretic, and during recovery shivering may sometimes be observed. It is usually transitory, and the patient should be covered with warm blankets.

Contra-indications.—There are few absolute contra-indications to avertin, and it has secured a well-deserved reputation for safety and reliability.

It should be employed with caution and only in small doses in patients suffering from low blood pressure, rental disease or low basal metabolic rates.

In regard to hepatic disease, and particularly hepatic insufficiency, observers vary in their opinions. But as avertin is known to be detoxicated by combination with glycuronic acid, it seems wiser to abstain from its use in these cases.

Avertin cannot be efficiently used in cases of rectal incontinence, and is not usually employed for operation in or around the anus, rectum or perineum.

GROUP II

Paraldehyde—$C_6H_{12}O_3$

This is a product of the polymerisation of acetaldehyde.

It has a peculiar and not pleasant odour, is mainly excreted by the lungs, and is soluble in 1 in 10 of water.

It is easy to dispense and administer, and is perhaps the safest of the basal narcotics.

This safety rests in the fact that in correct doses it has little, if any, effect upon either respiration or circulation.

Thus it is the anæsthetic of choice in cases of very high or very low blood pressure, also in wasting diseases, and asthenic states with a low metabolic rate.

The dose usually employed is one drachm per stone of body weight.

Mode of Administration.—The paraldehyde solution is heated to body temperature and is slowly run into the bowel, about three-quarters of an hour before operation.

The patient falls into a light sleep, which usually enables gas and oxygen to be given to complete anæsthesia without the patient being roused.

Rowbotham has greatly increased the usefulness of this drug by combining its use with other sedatives.

GROUP III

The Barbituric Derivatives.—The first of these was used on the Continent shortly after the Great War, and was known as Somnifene (allyl-isopropyl-barbiturate). This drug had the serious disadvantage of causing muscular and nervous excitement, and was abandoned in favour of amytal sodium, which was used by Zerfas, of Indianapolis, in 1928, and was the first barbiturate to be employed to any extent in Great Britain.

Amytal Sodium (sodium - iso - amyl - ethyl barbiturate).—Is usually given intravenously in a 10 per cent. solution, at a standard rate of 1 c.c.

per minute, until the patient becomes drowsy or just sleeps.

In normal subjects barbituric derivatives are almost completely broken up in the body, being oxidised in the liver and mainly excreted by the kidneys.

A small minority of patients are sensitive to the barbiturates and may show symptoms of overdose, the four chief effects of which are :—

1. Depression of the respiratory centre.
2. Massive and sudden fall in blood pressure.
3. Pulmonary œdema.
4. Broncho-pneumonia.

Such symptoms occurred with a disquieting frequency in the case of amyl-sodium, and it was soon given up in favour of nembutal, which is excreted much more quickly.

Nembutal (sodium - ethyl - methyl - butyl - Barbiturate).

Oral Administration.—This may be given by the mouth in the form of capsules containing 1½ grains. The normal adult dose is 3 to 4½ grains given 1½ hours before operation.

In the case of children, the normal is gr. 0.6 per stone of the body weight.

This method is the most unreliable means of securing basal narcosis. No uniformity of result can be attained, usually the patient is not quite unconscious, but sometimes they appear dangerously deep. If it is possible to use a trial dose before the day of operation this may give valuable information.

Intravenous Administration.—Nembutal is a white powder and is mixed with distilled water to form a 10 per cent. solution. The standard rate of injection is 1 c.c. per minute, and just enough is given to secure loss of consciousness. Although safe, nembutal is somewhat unreliable in its action. Sometimes a patient is too light and inclined to be restless, or else too deep, and narcosis persists too long.

The average result from nembutal does not compare favourably with that secured by a combination of morphia plus a minimal dose of evipan or sodium pentothal.

Nembutal may be given to children as a rectal suppository, the dose being about 1 gr. per year of age. The suppository is given three hours before operation, and this method has been claimed to produce greater uniformity of narcosis than the oral route.

On no account should intravenous nembutal be combined with the oral or rectal route lest overdose result.

Pernocton (sodium-2 YB-bromallyl-barbiturate). —This drug is a secondary salt of barbituric acid, and has the advantage of being ready mixed. This seems the only advantage, and in the opinion of most anæsthetists it has the disadvantage of sometimes causing vomiting, restlessness and an undue length of action.

The drug was first introduced in Germany as long ago as 1927, and although highly praised by a few anæsthetists, it is little used at the present time.

The More Recent Barbiturates

The most popular basal narcotis amongst the barbiturates, at the present time, are Evipan and Sodium Pentothal.

Both of these are speedy in action and excretion, and are more safe and uniform in their effects than the earlier members of the series.

Evipan (sodium salt of n-methyl-c-c-cyclohexamyl-methyl-barbituric acid).—This is a white amorphous crystalline powder, one gram of which is mixed with 10 c.c. of distilled water to form a clear solution.

Evipan can be used as a complete anæsthetic, but we are now concerned with its use as a basal narcotic.

For this purpose quite a small dose is required, and may be combined with a previous injection of morphia or omnipon. The advantage of such pre-medication is to avoid muscular spasm, and to enhance the effect of Evipan.

The usual rate of injection is 1 c.c. per 15 seconds in the first minute, a pause is then made to be sure the patient has lost consciousness; if this is not the case a further 1 c.c. is added in each 10 seconds until the desired result is attained.

Pentothal Sodium (Thio-barbiturate 8064).—This agent is an alternative to Evipan, each drug having advantages peculiar to itself.

Thus with Pentothal you get a more speedy induction and recovery, muscles are relaxed and rarely associated with spasm or twitching, and the patient has fewer after-effects.

Pentothal is useful for short orthopædic operations, and as a basal narcotics enables a nervous patient to be more rapidly and smoothly put to sleep.

Blood pressure falls less with Pentothal than Evipan, but depression of respiration is greater.

This depression of the respiratory centre may need treatment with oxygen and carbon dioxide, and certainly contra-indicates the administration of Pentothal in any but the lying-down posture.

Care must be exercised in the actual injection of Pentothal, because of its irritant effect if it leaks into the local tissues.

For this reason unless the selected vein be simple to puncture, or if the administrator has little experience, it is better to use Evipan as a routine, reserving sodium Pentothal for special cases.

Mode of Administration.—Sodium Pentothal is a yellow crystalline powder supplied in ½ gram and 1 gram ampoules which are mixed with 10 c.c. and 10 c.c. of distilled water respectively. A straw-coloured fluid results which gradually clears so that no precipitate remains.

A rather peculiar odour is noticed to emanate from the mixed fluid, and patients will sometimes complain of this smell during induction and even after recovery.

The drug is usually given five seconds slower per c.c. than Evipan, so that 3 c.c. are given at the end of the first minute, by which time unconsciousness has usually occurred.

A tourniquet of some kind is necessary to suitably distend the chosen vein in the anticubical fossa.

The Dickson Wright splint is very useful for this purpose; it keeps the patient's forearm still and has an inflatable cuff which forms a convenient and comfortable tourniquet.

Treatment of Overdosage.—To the measures previously mentioned, one may add repeated lumbar puncture, in the case of the barbituric derivatives.

Sector News

Guy's Letter

MORE and more members of the honorary staff are now resuming their teaching rounds, and Sir Arthur Hurst is to return to combined rounds held not between the halves of Bright but between those of Victoria. The cries of the new-born may not provide as suitable a background as the late Dr. Poulton's hissing tents and cylinders.

The number of out-patients maintains a high level indeed. During last week over two hundred new and over one thousand old patients were seen. In each department there is only one trained or training nurse, but there are some doctors, too, when their other hospital duties enable them to get there.

We are pleased to see Dr. Bishop back and hope he is now well.

Last week Mr. Hedley Atkins gave a most entertaining talk on " Odds and Ends " which ranged from ancient Britons to dividing lines into two parts and admiring the resulting formulæ. And oh, Relativity's so easy now! We will not mention in print Professor Ryle's family skeleton.

War changes men's callings. An obstetric surgeon was recently giving an anæsthetic for a delivery. On hearing the child give its first scream, the mother asked the old question—" boy or girl? Horror struck, the obstetric surgeon exclaimed, " Good heavens, you are supposed to be under an anæsthetic? "

R. T. H.

Pembury Letter

WE have now been informed of the conditions on which our service in the E.M.S. is to continue. No doubt in the next few days people will digest their meaning, and comments, if any, should then be audible. In the meantime it would appear that our income tax is certain till the end of August.

The 'flu, with its henchman the streptococcus, has been taking its annual toll. Prof. Nicholson, Dr. Grasby, Horan and Enderby are at present stricken, and we wish them a rapid recovery. We often wonder whether it is only the lay population who curse the medical profession for their inability to control the common cold. Maybe the cult of the yashmak now advocated in " shelters " will have unexpected results.

We now bring our epistle to a close, secure in the knowledge that amongst any possible readers we may obtain, we cannot number the sisters of another base hospital, who are advised, nay warned, to give us the widest of berths. As we know, they will never read these lines, Pembury activities to them must remain a closed book.

N. M. J.

Orpington Letter

IT is with great sorrow that we write this letter, for our doing so is necessitated by the departure of two of the oldest Orpingtonians: A. T. M. (Bobbie) Roberts has left us for Dartford, and we were extremely sad at his departure, but this sadness was intensified when we learned that his successor to the Orpington letter, Hawkins, was also to leave within the next few days for Guys. How we shall fare without the diplomacy of our Mess Secretary is difficult to imagine, and our heart goes out in sympathy to Budd, who will have to handle tactfully in the future the ever present accounts with Unwins, Ltd., wine merchants. These two leave us, however, with every good wish, and we trust that they will visit us as often as their responsibilities and petrol coupons allow.

It is with some temerity, also, that we pen this column, for the sudden disappearance of two former contributors gives us furiously to think lest we also go their way.

Hockey has begun again, and the stentorian voice of Hammond can once more be heard echoing over the field at the top of the Hospital, but at our last match we missed the familiar figure of Dr. Campbell whom the prophylactic administrations of a nearby pathologist had reduced to a state of pain and pyrexia. By the time this letter is in print, however, we trust that he will be back in his office asking us about patients, the medical histories of whom we are trying feverishly to remember.

We have heard a whisper that there is to be a plot of ground set apart for the "Doctors" that they may dig for victory, and remembering our Orthopædic Surgeon's teaching on the great therapeutic value of digging, we look to seeing Mr. Batchelor setting us a good example.

Dr. Scott will not, however, commit himself on the value of such exercise in the realm of Anæsthesia.

B. D. J.

Farnborough Letter

It might perhaps be considered an act of conceit to offer an apology to readers for the absence of a Farnborough letter from the last number of the *Gazette*; however, we may be permitted to mention by way of explanation that the omission was due to a hitch in transmission for which the writer can disclaim all responsibility. Having incurred the displeasure of the Editor on account of the late arrival of our earlier contributions, we decided a fortnight ago not to rely on the G.P.O., but to devise a means whereby the letter should be delivered by hand; unfortunately, this somewhat complicated scheme broke down at some stage, and, from what we can discover, our letter must have been incinerated with some dejecta from the Massage Department about ten days ago.

The ill-fated epistle dealt with several items of news concerning individual Guy's people at Farnborough—items, actually, which had been crowded out of previous editions by propaganda of a more general nature. We propose, therefore, to re-chronicle this news, although some of it has almost become history by now. A number of changes in personnel have recently occurred here, chief among the new acquisitions being Mr. Hamilton, who came to replace Mr. Corr, and who seems to have settled down very snugly in the palatial Midwifery Block. Judging from the frequency with which we meet him in the general wards he must be finding plenty to do in the Gynæcological line as well. His first act showed a touch of the dramatic; it consisted in performing Cæsarian section for what must be one of the more unusual causes of obsrtucted labour, namely an ossifying chondroma of the pubis.

There have also been changes among the Residents; Mr. Rawlings still sits at the head of their table, and Messrs. Rushforth and Jackson have now graduated to the dignity of old stagers, though the latter has changed his spots and become a H.S. Messrs. Burnford and Rochford have departed to join the Royal Navy. Both of them did much to enliven the Mess and the wards, and were very popular figures. We think they will take well to the water, for Mr. Burnford has already made a name for himself in the equatic world, and in the case of Mr. Rochford, it should be simply a question of exchanging one kind of bridge for another. Mr. Burnford, since leaving us, has got married, and we should like to take this opportunity of offering him congratulations and best wishes. Mr. Moore has also left us, but is remaining within the Sector at Guy's. The vacancies thus created have been filled by Messrs. Thomas and Chase. It seems a little late to bid them welcome as they have already put in some busy weeks as H.P.'s; we can, in fact, state that they seem to have mastered the local customs and the geography of this particularly rambling hospital with remarkable celerity.

Continuing our retrospect we ought to refer to the activities of the local version of the Pupils' Physical Society. Before Christmas, thanks to the efforts of Poulton and Sagarin, a few meetings had been held. These two students have now returned to Guy's, but their venture has been resurrected with Swann as the Secretary, and an interesting discussion of cases recently took place under the chairmanship of Dr. Navasquez.

Having more or less brought ourselves up to date, we shall close our typewriter and hope that this sheet having been cast upon the waters will, unlike our last, return again in print.

V. C.

Guy's Hospital Gazette

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Correspondence

Trainees in Pathology

To the Editor of the GAZETTE.

SIR,—If my last letter merely suggested that the wording of Dr. Shackle's letter might have been slightly different, it clearly failed in its object. My purpose was to deny the correctness of nearly all his factual statements. To this series I may now add another; it is quite incorrect to state that there is a "glut of pathologists," as Dr. Shackle would at once find out if he took the trouble to communicate with the Ministry of Health rather than his anonymous "E.M.S. Chief."

On the main issue—what should be the main pre-occupation of pathologists at the present time—it is clear that Dr. Shackle and I differ so widely that further discussion would hardly seem to be profitable.

Yours, etc.,
G. PAYLING WRIGHT.

Pathological Laboratory,
County Hospital,
Farnborough, Kent.

Criticism

To the Editor of the GAZETTE

SIR,—I have noticed with distaste that Passim is developing an oracular and exhortatory style, and is taking upon itself the combined functions of J. L. Garvin and Old Moore. It has acquired the stentorian voice of the former and the evasiveness of the latter, without the dignity or the sportiveness of these institutions.

I would not discourage the most critical attitude towards the course and conduct of this war, but I have not been able to discover what precise advice Passim has to offer in No. 1372 of the *Gazette*; unless its similarity to official verbosity is to be displayed as warning to our propaganda writers.

General Wavell, in one of his lectures printed in the *Times*, says that the principles of strategy can be grasped in a short time by any reasonable intelligence, the soldier's trade, the knowledge of topography, movement and supply, the recognition of what is and what is not, are the pitfalls for the amateur strategists. I do not think that Passim is qualified to discuss these technicalities of war; while the generalities are so often repeated that I can see no justification for adding another tongue to the daily clamour. Nor do I believe that Guy's men who are in the fight will be edified or entertained by this priest of platitude bowed down, for nearly 400 words, before his own purple passages.

I would not select any particular sentences for analysis, but according to the Ministry of Information, the people of Europe are not "to be placed in the category of a herd of cows, completely submissive to a boy with a stick and a barking dog." This is a stigma on our friends in Europe who have fought for freedom for the last twenty years and who are now defeated.

There are enough medical aspects of this war to prevent Passim becoming an anthology of evening newspaper leading articles.

Yours, etc.,
HUMPHRY OSMOND.

Guy's Hospital, S.E.1.

"Such criticism is appreciated."—*Editor*.

"America Revisited"

By W. H. Ogilvie, Esq., M.Ch.

(*continued*)

Monday, October 17th

Was devoted largely to opening meetings, with a meeting of initiates at 3 p.m. Having seen the latter last year, I gave the show a miss and spent the day seeing the instrument exhibitions and having a look round New York. At 6.30 was the Regents dinner, followed by the Presidential meeting and convocation in the grand ballroom, very much the same highly coloured spectacle as last year. Magdalen had attended a ladies' dinner given by Mrs. Besley, the President's wife, and was in a "Royal Box" in the gallery. We (Regents, officers and guests) processed through the aisle behind the mace to the strains of the organ, and took our places on the dais. We then had a prayer, an address of welcome by Henry Cave (President for 1939-40), introduction of foreign guests by Frank Lynd of San Francisco, address by the retiring President, Frederic Besley, inauguration of the officers, particularly Howard Naffziger as President. Then the 500 or so new initiates were presented by

Crile, and had the Fellowship conferred by the President. Then came my great moment: there were two Honorary Fellowships—the Surgeon-General of the United States Army, and myself. I was introduced in a few words by Arthur Allen, and then presented with the framed diplomas and invested with the hood. The President then awarded the honours and prizes for the year, and the meeting concluded with the annual oration by ex-President Walter Chipman of Montreal, a beautiful scholarly presentation of the aims and future of surgery.

Tuesday, October 18th

There was a choice of four mid-day table conferences—shock, infection in surgery, the immediate repair of cutaneous defects, and thoracic surgery, presided over by Rienhoff. I chose the first, partly because Beattie was speaking, but it proved too research-laboratory technical for me. Two items stand out—both, I think, from Freeman. He divided shock into three types :—

(1) Hæmatogenic, due to actual loss of blood volume : chief causes, hæmorrhage and extensive muscle trauma.

(2) Neurogenic due to vasodilatation. Primary shock such as pulling on mesentery, and excessive spinal anæsthetic are examples.

(3) Vasogenic due to chemical action on the capillary bed, seen in histamine shock, and ? anoxæmia.

He also related how if a dog is bled to half its blood volume and kept there six hours, it will die even though transfused, and even though all the original blood is put back again. But if a dog is first deprived of his whole sympathetic system, the same can be done and he will recover. The reason is that an intact dog, faced with profuse blood loss, will cut down the supply to most organs to keep the essential ones, heart and C.N.S., supplied ; when blood is restored, the deprived tissues have suffered permanent damage from anoxæmia, and death follows. The sympathectomised dog, on the other hand, cannot adjust, and all his tissues suffer or survive to the same degree. O'Shaughnessy and Slome's work was pretty severely criticised.

Magdalen and I had lunch with Lewisohn and his wife at their house—a charming couple and a nice meal. There was an official dinner by Henry Cave at 6.30, and in the evening I went to the scientific session of four papers. Cattell on recurrent hyperthyroidism put an hour's talk into twenty minutes : lots of meat, but condensed to a beef-cube.

We went with Dickson of Cleveland, handsome and cheery as ever, and young Robins, doctor of the Washington, to the Cotton Club for a brilliantly clever, vivid, and noisy spectacle.

Wednesday, October 19th

Met Dixon of the Mayo Clinic for breakfast, and the other 11,999 surgeons of America before noon. I went to the round table conference on hypertension. Very interesting, and I was impressed by the ability of these men to talk, particularly Adson. They are apt, when reading a paper, to spoil it by cramming any amount of useless figures in, but at this sort of show they are at their best.

Page (seems to be research physician, former colleague of Heuer) repeats that problem of experimental hypertension in dogs is not the same as the human problem ; even in totally sympathectomised dogs, renal clamping will send up arterial tension. Comparing the effect of medical and surgical treatment on the main symptoms of hypertension, he estimated the results to be as follows :—

Headache is well relieved, both by medical treatment (cyanates) and by surgery.

Irritability and fatigue.—Surgical treatment is better.

Cardiac pain.—Surgery usually relieves completely, medicine may improve, but is unreliable.

Changes in the retinæ.—Surgery often produces dramatic improvement, and always does some good, medical treatment is useless.

Damaged renal function.—Surgery has no effect, beneficial or harmful.

To sum up : for hypertension, where the nervous element predominates, where symptoms are progressive and where medicine fails, surgery is indicated ; in malignant hypertension medical treatment is uniformly bad, whereas occasionally brilliant results may follow operation, and it is worth doing if the risk is not prohibitive.

Adson followed. He spoke admirably, polished sentences flowing from his lips with such rapidity that I could only get down his results :—

Failures	20 per cent.
Temporary improvement	28 per cent.
Fair result	28 per cent.
Good result	20 per cent.

One surprising statement was that a few patients after operation had a very much lower blood pressure standing than sitting. I asked him after the meeting how these ones got on; I gathered it was just too bad, but a belt put them right again.

Smithwick of Boston followed. He had mostly used Peet's operation, and considered adrenalectomy useless. He gave an excellent report on his series and that of others, results carefully graded, and assessed as impartially as could be expected. The impression I got was that the real hypertensions were very rarely benefited, and that the successes were confined to the young group with excellent reactions to tests, that is ones who, though they had not improved by medical measures, ought by all rights to have done so.

Heuer spoke last: a charming man, but the strictly impartial scientist. His job was to assess the different operations, as far as possible on strictly comparable cases. He had used rhizotomy, supra-diaphragmatic splanchnicectomy (Peet), and Adson's operation. He found that rhizotomy gave better results than the other two as regards the blood pressure, but the difference was not so apparent with symptoms. The risks of rhizotomy are considerable, one being paraplegia. He does the operation in two stages; first laminectomy, second rhizotomy. He recited one case who had paraplegia following the first stage only; his blood pressure, however, which had resisted all medicines, dropped to normal and has remained there ever since.

Thinking over the impressions of this Conference in the evening, I felt that the most of this hypertension problem was contained in Smithwick's paper, and that operation is a lot of fun but pretty unscientific and not likely to survive very much longer.

Beattie was getting worried about his wife's progress after her operation, and decided to leave this afternoon by the *Queen Mary*, so we went to see him off. It was great to see the ship packed with passengers and surrounded by a seething mass of well-wishers. Her arrival in her berth during the strike two days before without a tug to help and without any fuss or ballyhoo had impressed New York profoundly; she now went off the same way, without the slightest fuss, throwing off hawsers, churning the water astern and gliding out into the Hudson with gathering momentum, turning and speeding off towards the statue of Liberty. As she faded away to a towering silhouette in the dusk, she passed the Italian liner coming in. To our great joy we found that the wops had somehow got hold of a few tugs, though the strike was still on, and she was very slowly and laboriously pushed and guided into her berth like an old lady.

(*To be continued.*)

Sport

Rugby

Guy's v. Aldershot Command

(*At Honor Oak Park, on Saturday, February 15th*).

YOUR reporter has to commence with an apology to the spectators for such a long delay in starting the game. The explanation is that the press erroneously announced the kick-off as 2.30, which should have been 2.45 as scheduled on the programme, but the chief cause was the Command's coach driver losing his way, and although the visitors arrived changed, it was not until 3.50 that the teams took the field. The club officials offer their deep apologies for the long wait.

Those who stayed on saw a good hard game with defence supreme over attack. Most of Guy's attacking movements fizzled out on the wings where Gartrell and Charlton were rendered harmless by their opposite numbers. The work of the Guy's pack in the loose was most refreshing, and in the line-out they were very smart in getting the ball away. Scott at scrum half played grandly, always in the thick of things, and often breaking away; he compared most favourably with Tindill, the famous All Black opposed to him.

Strathie, as usual, was in great form, Brangwyn and Kynaston had plenty of thrust, and it was a pity some of their fine movements were not turned to better account.

Aldershot Command also had a fine pack, well led by Prescott, and one admired the work of Anderson at fly half, who worked well with Tindill. The Command's wingers at times looked dangerous, but Gartrell and Charlton marked and tackled well.

The game started with Guy's attacking. First Charlton tried to get through, and then Strathie and Mullins together, but the Command drove us back to our '25 where Matthews tackled nicely, with Swann following suit. Strathie was tackled when going strong, and again Guy's had to defend, a tackle by Mullins relieving the pressure.

Aldershot Command missed a penalty kick, and Swann stopped a dangerous three-quarter movement. Guy's were awarded a kick which ended in a scrum in the Command's '25 through the full-back knocking on. Scott whipped the ball out to Strathie, who dodged through the opposition for a grand try near the posts. No goal points were added.

Brangwin sent Charlton away, who cross-kicked, and from the resultant scrum, the Command were penalised and Mullins kicked a penalty goal.

At this stage Charlton and Gartrell could not get through in spite of some good work by Strathie, Brangwin and Kynaston.

The Command had their fair share of play, but our defence stood firm. Guy's should have had a try when Brangwyn sent Swann away, but the latter held on and was tackled with two other players waiting for the pass, and a clear run. Half-time arriving with Guy's leading by 6 points to nil.

In the first few minutes of the second half, both sides were kicking to touch to make ground, play ranging from one end of the field to the other. The Command got a footing in our '25, but Swann broke through, turning a complete somersault on being tackled, and Lewis was compelled to touch down for a drop out.

Kynaston broke away nicely, but Brangwyn was tackled as he took the pass. This brought the Command back to the Guy's line, but Lewis recovered from a fumble and cleared to touch. A dribble by Anderson was stopped by our forwards, and then Strathie and Sharpe almost had Gartrell away, but Anderson later got possession from the loose to make a nice opening for Slight to score a well-deserved try for the Command, which was not converted.

Guy's set up an attack, their forwards handling well with Everall prominent. A kick to touch by Strathie, was followed by Robertson, the Command's right wing breaking away, but Mullins got him down. Another Command movement was stopped when Brangwyn found touch, and then Kynaston made a nice punt ahead which Gartrell failed to reach. Tindill tried two or three times to get Birchall, the Command's left wing, away on the blind side, but Swann and Charlton were too smart for them.

A dangerous Command movement ended with Exton, the Command's left centre, barging into the Referee, and Nicholas, the opposing full back, almost got Robertson away, but Gartrell made a good tackle.

A grand movement by Guy's ended tragically: Strathie cut through, and Kynaston, taking the pass made ground before transferring to Brangwin, who in turn transferred to Charlton, for the latter to get over the line and have the mortification to see the ball shoot out of his hands.

No-side was called with the score: Guy's 1 penalty goal, 1 try (6 points). Aldershot Command, 1 try (3 points).

Team.—T. L. T. Lewis; D. W. F. Charlton, P. L. Brangwyn, R. U. F. Kynaston (Captain), P. C. Gartrell, D. M. Strathie, N. I. Scott, J. D. Everall, R. M. Sharpe, A. J. Lee; J. Breen-Turner, J. R. C. Matthews, M. R. Mullins, T. W. Renton, W. F. Swann.

Guy's v. Cambridge University

(*At Cambridge on Wednesday, February 19th*).

FOLLOWING their recent run of successes, Guy's travelled to Cambridge determined to give the University a very hard game, and even had hopes of bringing off a surprise.

Guy's were unable to play Lee, who has a broken nose, and Breen-Turner played in the front row, but Albers made a re-appearance after his illness.

All hopes of beating Cambridge were shattered in the first quarter of an hour, as the Light Blues piled up eleven points before Guy's had settled down. The Cambridge outsides played in whirlwind fashion, and the delightful passing was so rapid that the Guy's defence were unable to cope with their attacks. Throughout the game the Cambridge centres were constantly breaking through and finding gaps, in addition to which, Knapp, the Welsh international of last season, was in grand form and Camp had a busy afternoon trying to hold him.

It was not exactly all Cambridge, in spite of their wonderful all-round combination. Guy's had more of the ball from the set scrums, thanks to Sharpe's good hooking, and although they played well in the loose, the Cambridge pack proved themselves superior in this phase of the game. It was no mean effort to cross the Cambridge line four times, and these resulted from some really good movements by the outsides.

In the first half Cambridge scored 16 points. Watts, who was in fine form, went over for two tries, Knapp one try, and a forward, from a forward rush got the other. Wright was able to add the extra points to two of the tries.

Guy's 8 points came from Strathie, who made a dazzling cut through the centre to touch down for Mullins to kick the goal. A really grand try. Then Gartrell went over, too far out for Mullins to convert.

The second half went much in favour of the Light Blues, though Guy's gave them a hard game, and would have done better had their tackling been more accurate. Cambridge got two early tries to give them a commanding lead, but Guy's fought back and thoroughly deserved tries scored by Camp and Gartrell respectively. To wind up the scoring Cambridge went over again, and Wright kicked his third goal, a nice afternoon's work. The Cambridge try getters were Watts (3), Knapp, Shirley (2) and Bretherton.

Guys' had so much confidence in their pack that they took scrums for line-outs whenever they got near the Cambridge line.

Cambridge thoroughly deserved their win, and the score represents the difference between the two sides on the run of the play,.

Score.—Guy's, 1 goal 3 tries (14 points). Cambridge University 3 goals 4 tries (27 points).

Team.—T. L. T. Lewis ; R. F. Camp, P. L. Brangwyn, R. U. F. Kynaston (Captain). P. C. Gartrell, D. M. Strathie, N. I. Scott, J. D. Everall, R. M. Sharpe, J. Breen-Turner, A. G. Albers, J. R. C. Matthews, M. R. Mullins, T. W. Renton, W. F. Swann.

Boxing

INTER-HOSPITAL BOXING WON BY GUY'S

MEDICAL students can always be relied upon to provide exciting entertainment in boxing tournaments, and in the first war-time Inter-Hospitals championships held at Guy's in the New Pavy Gymnasium, on Wednesday afternoon, February 26th, they excelled themselves.

Guy's Hospital, who had seven representatives to nine, entered by the other hospitals, won the tournament with 35 points. St. Bart's, their nearest rivals, having 20.

Quickest win was secured by A. A. Halamandres (Guy's) when defending his lightweight title. The Guy's captain worked so fast with speedy footwork and powerful punching that his opponent P. Lambah (Westminster), had no time to settle down to an orthodox campaign, and the fight was stopped in the first round after Halamandres had landed some stinging blows.

In the middleweight semi-final Tom Lewis (Guy's) introduced sufficient of the unorthodox into his work to keep C. E. J. Glaisher (St. Thomas's) puzzled, and although he was persistent in his efforts to land a damaging punch, and succeeded in robbing Glaisher of his speed by hurtful attacks, he could not match the ringcraft of the St. Thomas's man. C. Slowe (St. Bart's) won the middleweight final without a fight, Glaisher withdrawing from the final because of an injured right hand.

C. R. W. N. Luntz (Guy's) fell prey to J. W. G. Evans (St. Bart's) in the welterweight final, the fight being stopped at the end of the second with Evans the winner.

R. N. Lewis (Guy's) gained a well-earned points victory over H. Pezeshgi (St. Bart's) in the flyweight division. There was plenty of good honest fighting in the bantamweight final, while it lasted. E. Harvey (Guy's) was declared the winner, J. S. Watson (St. Mary's) retiring with an injury to the eye in the second round.

J. D. Whittall (St. Bart's) beat P. Holford (Royal Dental) on points in the light-heavyweight division, while A. G. Albers (Guy's) boxed well to win the heavyweight title by beating M. G. Ashby (London) on points.

Hospital Information, etc.

Pass List

UNIVERSITY OF LONDON.
December, 1940.
D.Sc.
P. A. I. Gover.

Papers by Guy's Men

Navasquez, S. De. Nutritional Œdema as a complication of Jejunocolic Fistula. *Brit. J. Surg.*, 1941, **28**, 468.

Layton, T. B. The aims and methods of teaching in Laryngology. *J. Laryng.*, 1940, **55**, 495.

Mollison, W. M. Teaching. *Ibid.* 503.

Hurst, Sir Arthur. Hysterical contracture following injuries in War. *Clin. J.*, 1941, **70**, 29.

Changes of Address

C. E. Gallagher, Major, R.A.M.C., Headquarters, South Eastern Command c.o Home Forces.

H. Millett, M.R.C.S., L.D.S., 48, Portland Place, W.1. Tel.: Langham 2284.

Miss G. Smyth, P.M., R.A.F., Nursing Service Reserve. St. Athan, Glam.

Honours

M.B.E. (Military).

Lieut. Robert Elmer Horton, R.A.M.C., for conspicuous gallantry in carrying out hazardous work in a very brave manner.

Special Mention

In the list of officers whose names have been brought to notice in recognition of distinguished services in connection with operations in the field, March and June, 1940, is the following :

Col. A. L. Foster.

Births

DYKE.—On February 20th, 1941, at Coulsdon, to Eleanor (née Walker), wife of Flying-Officer W. R. Dyke, R.A.F.V.R.—a son.

RHODES.—On February 17th, 1941, to Margarette (née Gibbs), wife of H. P. L. Rhodes, L.D.S., of 4, Causewayside, Haslemere, Surrey—a daughter.

Deaths

HELMER—On February 19th, 1941, as a result of a motor accident, Thomas Helmer L.D.S.Eng., Deputy Dental Secretary, British Dental Association.

POLLOCK.—On February 25th, 1941, Richard Gordon Pollock, M.R.C.S., L.R.C.P., of 61, Langdale Road, Hove, and late of Warlingham, Surrey, aged 76.

Eds. N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV — *22nd March* 1941 — *Number* 1374

PASSIM

RECENTLY two more high-explosive bombs added themselves to our already impressive list of direct hits. The first exploded itself in the front quadrangle without disturbing the well-muffled figure of Thomas Guy. The second bomb was of the delayed-action type and became buried some thirty feet in the ground between the colonnade and Martha Ward. A few days later the Bomb Disposal Squad, with perfect and expert organization, and with enviable daring, removed the neoplasm. An interesting sidelight on these men is that they receive no extra pay for their dangerous occupation and they are not voluntary. On asking one of the men whether he did not resent being made to serve on such a hazardous job, he proudly replied: "If you made this job a voluntary one you'd have the entire British Army turning out to do it."

And so, once again Guy's Hospital is left standing like a miraculous sphinx in a desert of ruination; other districts were not so fortunate and we were kept busy simultaneously evacuating the wards and offices near the delayed action bomb at one end, and receiving battered casualties at the other.

That old criticism concerning the civilian medical staffs in the E.M.S. not taking their part in the uniformed services, certainly finds its answer in the performance of our men in the Guy's sector. While it is not possible for obvious reasons to reveal the actual statistics, it is sufficient to say that we have received and dealt with a very considerable fraction of all the casualties due to enemy action that have occurred in Great Britain. When our stairs and lifts have been bombed out of existence we have built temporary wooden stairs and skids, when wards have been destroyed, we simply screen off the wrecked portion and uses what is left, when the stream of casualties threatens to fill all the available beds, the evacuation service starts up and the congestion is relieved, and all this is accomplished often during an aerial bombardment sufficient to make many a world war veteran shrink with fear. Yes, this is an enviable record, with accomplishments enough to satisfy the conscience of any man whose sole desire is to serve his country.

Because of the apparent exposure of Guy's to enemy bombing with the possible increase in the shortage of available bed accommodation, it was suggested by the Ministry of Health that it would be an advantage to have an annexe or branch hospital outside London.

The Governors of Guy's have therefore, acting in conjunction with the Ministry of Health, arranged to open an annexe at the Wildernesse Country Club, Seal, near Sevenoaks, which has been acquired for this purpose. This house which stands in many acres of ground, will make an ideal annexe, and work is now being carried out on the necessary alterations and extensions which, it is hoped, will be completed during May. This new hospital will be of between a hundred and a hundred and ten bed capacity, will receive both civilian sick and casualties and will include an up-to-date operating theatre, clinical laboratory, X-ray, and deep X-ray therapy departments.

The personnel of the hospital is to be derived entirely from Guy's people, and it is likely that the administration will be controlled from Guy's. In addition to a surgical registrar who will be the resident medical officer in charge, and three house officers, Miss Bell, the senior assistant Matron of Guy's, who is at present at Farnborough County Hospital, has been appointed to "Guy's Annexe" with the title of Lady Superintendent.

While everyone is now quite familiar with the increasing aid that our neighbour, the United

States of America, is giving towards the war effort, the knowledge that Guy's Hospital itself has been singled out for assistance, makes us feel its reality all the more. The American Organization known as "Bundles for Britain" who have done so much to assist in the work of alleviating the distress caused by air raids, has sent this hospital the magnificent sum of over £2,200 ($10,000) to help with this scheme. To our American readers, we offer our gracious thanks and good wishes for ever increasing co-operation.

◆

NOWADAYS with the constantly changing ward personnel, in view of the fact that it is often necessary to abandon a ward at a moment's notice, it seems advisable that a duplicated inventory of all the ward's property be kept by the sister-in-charge. In this way, it will be easy to assess the extent of air-raid damage and what is even more important, to preserve the intact supplies for further use.

Actinomycosis

By N. L. Eckhoff, Esq., M.S.

ACTINOMYCOSIS, tuberculosis and syphilis are the three commoner chronic inflammatory diseases met with in this country. In tropical countries certain others may be added to complete the list of the chronic granulomatous diseases.

Actinomycosis is produced by an organism which is characteristic and picturesque. It is made up of a central portion, which is a mycelium of Gram-positive branching filaments with a tendency to spore formation, and a peripheral zone in which rod-shaped, clubbed, Gram-negative processes are arranged radially. The whole is sufficiently large to produce in life a yellow nodule in the prurient exudate, visible to the naked eye, and is usually given the name sulphur granule. It can be rendered more obvious by sloping the test tube containing the pus and looking through the attenuated film at the top or by shaking the pus with water when the sulphur granules float in the agitated fluid, the rest of the pus becoming emulsified.

The organism usually held responsible is the Actinomyces Bovis, which produces "woody tongue" in cattle, and infection in man was attributed to the habit of sucking straw. The evidence of this habit is usually absent in human cases. Furthermore many varieties of Actinomyces have now been described—some with gram-negative filaments, and the latest view is that it is not the Actinomyces Bovis that produces the disease in man, but an organism to be called Actinomyces Israeli or Actinomyces Hominis. Let it be noted that the organism only grows anaerobically and should therefore always be cultured by this method when suspected. In cultures, filaments only are found, but in sections of diseased tissue, clubs may be seen.

Recent work by Sullivan and Goldsworthy (1940) revealed actinomyces in the mouths of 6 out of 100 people not suffering from the disease, and it is therefore reasonable to assume that the disease is autogenous. The parts of the human body most commonly affected are the jaw, the intestine and the chest.

The Jaw (about 55 per cent. of cases).

Attention has already been drawn to the fact that actinomyces are to be found in the mouth in a proportion of people. A typical history is as follows: The patient attends a dental surgeon with a brawny hard swelling in the region of the angle of the jaw. A tooth is suspected as being the cause of the swelling and extracted. The swelling persists and another tooth is extracted. A third may suffer in the same way. In some instances the disease *follows* extraction. About this time the swelling in the neck begins to soften and breaks down or is incised. Another swelling appears lower in the neck and goes through the same process. Finally the patient has a series of incisions arranged in step-ladder fashion down the neck reaching to the clavicle. The diagnosis should have been suspected at the start and confirmed at the first incision.

Here let me point out that the disease spreads by direct infiltration of the connective tissue planes of the body and is therefore a cellulitis. It usually spreads downwards but may also spread upwards and deeply. I have described two cases in the *Lancet* (and 83 have been described before) in which such upward spread eventually conducted the disease to the base of the brain, via the foramina of the skull, leading to meningitis, brain involvement and death. In one there was a separate extension via the temporal region to the lateral aspect of the skull where the bone became eroded, and a small cerebral abscess developed underneath. I am also able to show you a photograph of another patient in whom an actinomycotic abscess developed in the parotid region.

Lymphatic spread is virtually unknown.

The Chest (15 per cent. of cases).

Actinomycosis of the chest is presumably the result of inhalation. The symptoms are various and the patient may be thought to be suffering from bronchitis, bronchiectasis, tuberculosis or pneumonia until someone discovers the organism in the sputum. Pus may be coughed up or an empyema or mediastinitis develop quietly, and if unrelieved may burst through the chest wall. The last patient of this sort I saw had a large mass in front of the sternum with multiple sinuses discharging pus. In these cases cerebral abscess is not uncommon from blood-stream metastasis.

The Abdomen (about 20 per cent. of cases).

The disease practically always starts in the appendix, presenting all the symptoms and signs of acute appendicitis. The only notable fact is that the patients usually come to hospital rather late, either with peritonitis or with a well-developed abscess in the right iliac fossa. The subsequent development is well illustrated by the following two cases.

Case 1. Boy aged 8. Admitted to hospital on January 21st, 1939, as a case of acute appendicitis with a 3-day history of pain, diarrhœa and vomiting, and a temperature of 103° F. The abdomen was much distended, resistant to the touch and slightly tender on the left in the region of the spleen. A boggy swelling could be felt per rectum. Peritonitis, probably appendicular in origin, was diagnosed, but the child was considered too ill to stand operation. Since pneumococcal peritonitis could not be excluded a course of M. & B. 693 was given, starting with one tablet 4-hourly for 6 days, followed by one tablet 8-hourly for 9 days—total 31½ g. The temperature came down to 100° F. at first, but later rose again, and in the third week was in the neighbourhood of 102° F. The abdominal distension gradually lessened, and localised masses could be felt, particularly in the lower abdomen, and a rounded swelling was felt per rectum.

On February 11th operation was performed for drainage of the collection in the pelvis and the right iliac fossa, but no attempt was made to remove the appendix. Discharge was free from both incisions, but later became less in amount and rather thicker. Actinomycosis was suspected but culture grew Bacillus coli only. On March 10th the pus contained a gram-positive branching streptothrix, and on the 27th anaerobic cultures yielded a good growth of Actinomycosis bovis after 21 days. Aerobic cultures grew coliforms, non-hæmolytic streptococci and Staphylococcus albus. At this time the boy was given pot. iod. gr. 10, t.d.s. for two weeks and tinct. iodi m. 5 in milk, with no improvement. The temperature still rose to 101° or 102° F. each evening, and profuse discharge continued from the wound.

Beginning on April 10th two tablets of sulphanilamide were given 8-hourly for 6 days followed by one tablet 8-hourly for 10 days—total 33g. By the 15th there was great improvement. The discharge was much less, dressing being now necessary only once instead of six times a day. The mass in the abdomen appeared to get smaller and the boy began to gain weight. By the end of the second course of sulphanilamide the wound was dry but the abdominal mass still persisted, though it was much smaller. A third course was therefore given three weeks later.

On July 12th the boy was referred for deep X-ray treatment to consolidate the cure, since there was still a little induration above the inguinal ligament on each side and in the recto-vesical fossa. A total dose of 2,000 units was given in 24 days.

On January 5th, 1940, he returned to Hospital with a mild attack of abdominal pain, fever and a small lump in the right iliac fossa; the symptoms subsided with sulphanilamide.

On February 26th he returned to have his appendix removed. No adhesions were found in the abdomen though the appendix was scarred and bent sharply in the middle, showing that it had almost certainly been the original focus of disease. The peritoneal cavity appeared normal in every respect. Pathological report on the appendix was chronic fibrosis; no actinomycosis discovered.

This boy was very ill, on the danger list for many weeks, and the disease was steadily progressing in spite of treatment when sulphanilamide was given. The improvement was immediate, and we feel certain his cure was due to chemotherapy. Because this was our first case X-rays were given as well, but not until he was almost well. The cure was confirmed at the subsequent operation.

Case 2. Boy aged 15. Admitted to hospital on March 18th, 1940, with a history of abdominal pain for 2 days, at first central, later going to the right iliac fossa. Vomited at the onset. Extreme tenderness was found in the right iliac fossa, with much surrounding rigidity. Operation was performed without delay and a gangrenous perforated retrocaecal appendix was removed. One drain was passed into the pelvis and another behind the caecum. On the 24th he had signs of pelvic abscess, which was drained suprapubically on April 3rd. Pathological report on pus: gram-positive branching streptothrix filaments and a few gram-negative bacilli. Aerobic culture after

14 days gave good growth of B. coli; moderate growth of slightly hæmolytic streptococcus; anaerobic culture after 14 days gave moderate growth of branching streptothrix resembling A. bovis. On April 7th, fæcal fistula from gridiron incision. Signs of subphrenic abscess developed on the 11th. The eleventh rib was resected and two large kidney dishes of pus evacuated; tube inserted. On the 16th sulphanilamide was given, four tablets immediately, two tablets 4-hourly for 4 days, one tablet 4-hourly for 7 days—total 47 g. At the end of this course his general condition was improved, though he was still pyrexial. On April 29th the sinus was packed with 20 per cent. thymol in oil and thymol gr. 10 was given by mouth on alternate days.

On May 14th he was discharging pus from the umbilicus in addition to the grid incision, the suprapubic incision and the subphrenic incision. A second course of sulphanilamide was given, three tablets immediately and two tablets 4-hourly for 7 days—total 43½ g. Temperature fell from 99°-100° F. to normal in 2 days. By July 7th he was getting up. Still discharging pus from umbilicus and rib sinus; suprapubic sinus healed; fæcal fistula from gridiron incision. Umbilical sinus closed on August 4th. Slight fistula from grid incision and slight discharge from rib resection incision. On August 26th an operation for acute intestinal obstruction was necessary. Many adhesions found binding down small intestine; no abscess cavity. He made a good recovery and was discharged on September 26th.

Not all abdominal cases end so favourably as these. Not infrequently tributaries of the portal vein become infected and suppuration spreads to the liver forming an actinomycotic abscess which is distinguished from other liver abscesses by being honeycombed or sponge-like in appearance. This is a very fatal complication. In others the intestines become matted together by adhesions, and fistulæ may form between hollow viscera—such as a vesico-intestinal fistula. Fistulæ between the intestine and the abdominal wall also occur and may never heal. In others the cellular tissues of the abdominal wall are progressively invaded and destroyed, and I can well remember one patient in whom the ilium was sticking up in the wound like the sail of a ship, the soft tissues having been destroyed on each side. This reminds me of the fact that while actinomycosis may attack bone, it does so somewhat unwillingly and necrosis is slow to occur.

I have elsewhere described two cases of actinomycosis arising in the large bowel, one in the transverse colon, one in the pelvic colon. In both cases left-sided abscesses developed, and as both were men with rather rotund abdomens diverticulitis was suspected. Incisions were made and both cases came to me after many months with the diagnosis already established.

While the majority of cases of actinomycosis occur in the three regions mentioned, the face and neck, the chest and the abdomen, the disease is not unknown in any part of the body, and I have already pointed out that the central nervous system may be involved secondarily.

TREATMENT.

From the fact that potassium iodide apparently cures the disease in cattle, this drug has long been used in man, and heroic doses up to grs.300 a day have been recommended. The results were not always satisfactory and iodine in milk became popular at one stage. Collosal iodine, intravenous sodium iodide, Iodipin, copper sulphate, Yatren, formalin, salvarsan, thymol, X-rays, radium, vaccines and extract of lymph-glands have been used in addition to general medical and surgical treatment. The fact that the organism is anaerobic suggests that the admission of air or introduction of Hydrogen peroxide may be helpful. As always, the length of the list indicates that no remedy is specific. Of all these measures X-rays and radium alone seem to have produced marked results. In the cervico-facial and some of the chest cases the disease appears to have been cured. In some of the abdominal cases the patients have remained alive for years, with occasional recrudescences of infection, sometimes necessitating incision.

Quite recently actinomycosis has fallen under the sledge-hammer of chemotherapy. The late Dr. Poulton was the first to describe in October, 1937, an abdominal case thus treated with successful results. Miller and Fell (1939) described one case in which the treatment started in January, 1938. Oliver Walker (1938) described another and Ogilvie (1940) yet another. Dorling and I (1940) were able to describe 5 cases, the first treated in 1939, four of which recovered completely, but one died 20 days after admission. In one, whose case history I related earlier, all evidence of disease had disappeared when the appendix was removed a year after the commencement of the illness.

Four cases of cervico-facial type responding to sulphanilamide have also been recorded. Ogilvie raises the question whether the drug acts upon the actinomyces itself or on the concomitant organisms. This is an interesting theoretical point not yet elucidated. But I have no hesitation in saying that, once sceptical, I am now satisfied that the drug has a remarkable effect. Actinomycosis should always be considered in inflammatory lesions that do not resolve as expected, and direct examination and anaerobic culture of the discharges made. Sulphanilamide should be used early in all cases.

REFERENCES

Dorling, G. C., and Eckhoff, N. L. (1940), *Lancet* 2, 707.

Eckhoff, N. L. (1941), *Lancet* 1, 7.

Miller, E. M., and Fell, E. H. (1930), *J. Amer. Med. Ass.*, 112, 731.

Ogilvie, W. H. (1940), *Brit. Med. J.*, 2, 254.

Poulton, E. P. (1937), *Proc. Roy. Soc. Med.*, 31, 164.

Sullivan and Goldsworthy (1940), *J. Path and Bact.*, 51, 253.

Walker, O. (1938), *Lancet* 1, 1219.

Farewell to the College

By Dr. P. M. F. Bishop, Warden of the College

In view of the damage sustained by the college in the big London Fire Raid it has been decided to close it, and it is very unlikely ever to be used again.

Three years ago there was an almost unanimous opinion that it was no longer a fit place for the students and House Officers to live in and I think most Guy's men would have agreed that the best thing that could happen to it would be that it should be destroyed by fire. And yet now that it has been there will be a number who will regret the passing. With all its faults it has been the scene of many activities intimately bound up with the life of the Hospital, and there are few old Guy's men who forgot to pay a visit to the college when they returned to the hospital, if only to show their friends the Externs' Room, or to have a drink in Gray's Inn and a chat to William Gray or Shipcott or Dennis.

Fifty years ago when it was first opened it was the pride of the hospital and Guy's was the first hospital to provide accommodation on such a scale for its students and House Officers. It played an important part in hospital and school policy. Its Wardens, Sir Cooper Perry, Mr. Dunn, Mr. Eason, Mr. Mollison, Mr. Bromley, Professor Ryle and Group-Captain Conybeare have all of them been intimately associated with the administration of Hospital and School. All of them were students, house officers and members of the staff of Guy's and thoroughly saturated with the atmosphere of the place. Perhaps more than any other part of the hospital buildings it was the home of "the spirit of Guy's." Perhaps that is why some of us will regret saying "Farewell to the College."

Just before the war a very careful investigation was made of the possibilities of building a new college, a place of which Guy's would be just as proud as it was of the college of 1890. The need for such a college was acutely felt in 1937 when other hospitals were providing up-to-date and comfortable accommodation for their students and house officers, when the leisure hours of the student and house officer were beginning to be considered of as much importance to a hospital and medical school's reputation as the teaching and clinical experience that could be offered. At that time it was realised that the Hospital could not much longer depend for its reputation on its 19th century worthies, but must enter into competition with other teaching hospitals in all aspects of medical education and that the brilliance of its clinical and teaching staff and the facitities for recreation and residential accommodation must be even more important features of attraction to the prospective student. If that was true of 1937 how much truer it will be of 194–, when the war is over. In that new era the new blitz-ridden generation of medical student will be even less likely to take it for granted that Guy's is a good hospital because the busts of Bright, Wilkes and Astley Cooper stand on pedestals in the Medical School. The future Brights will be attracted by the present Brights, but they will also want to know that they are coming to a hospital efficient and thoroughly up-to-date both in its recreational as well as its clinical activities.

There is no question that the future policy of the hospital and the school must be more completely co-ordinated than in the past: there is also no doubt that the recreational and residential accommodation of both the student and house officer must receive priority of consideration in planning the new Guy's: quite obviously there must be a new college. But while we can be sure that the Governors of both the Hospital and School will give this problem their due consideration it is a matter which will be especially close to the hearts of all Guy's men. What better War Memorial could there be for Guy's than a colllege fit for Guy's men to live in.

Correspondence

Sonne Dysentery

To the Editor of the GAZETTE

SIR,—Within a few months of qualification, most of us must have become painfully conscious of the inadequacy of our knowledge of preventive medicine and even simple hygiene. Clinicians treat cases, pathologists examine specimens, and lecturers in public health discuss long and short hoppers; very seldom does the student or house officer hear enlightened discussion on the limitation of outbreaks of infectious or contagious disease.

This hiatus in medical education is not entirely responsible for the enormous numbers of cases of avoidable illness which occur yearly. In regard to the control of disease among the general community, it would be interesting to speculate on the relative parts played by the public and the medical profession, for the efforts of even the most enlightened Medical Officer of Health are often thwarted by the ignorance and stupidity of the public, both on and off committees; on the other hand, sometimes backward medical officers are pressed by laymen to utilise recognised preventive measures.

The control of infections contracted in hospitals, however, is a matter entirely in the hands of the medical profession, and though lack of facilities—structural, administrative and financial—may impede, there can be no doubt that we are very far from utilising the facilities available.

A recent investigation showed that 18.9 per cent. of the patients admitted to certain wards at University College Hospital developed intercurrent infections, and there is reason to believe that the rate is higher in many other hospitals.

It is, therefore, to be deplored when false beliefs are spread among medical men at their most receptive stage. I have recently had occasion to discuss the control of Sonne dysentery with both students and house officers, and was told that the present-day mildness of the disease justified a *laisser faire* attitude in the clinician, allowing him to take liberties with the usual public health measures of control; further, that Sonne dysentery carriers are so common that no purpose is served by their detection and elimination.

The definition of the " mildness " of a disease is a matter of clinical opinion, and it is true that few cases die as an immediate result of the dysentery. Between 1931 and 1936, 45 cases of Sonne dysentery were admitted to a Glasgow hospital, and 8 died. Hay (1930) observed 7 fatal cases in children infected in a hospital at a time when the disease was generally mild. Cooke (*B.M.J.*, August 3rd, 1940) reported two interesting non-diarrhœic hypertoxic fatal cases, and reviewed the literature relating to a number of similar cases. It is important to remember, however, that diseases such as tonsilitis and dysentery often affect very seriously patients already suffering from other diseases, so that the accelerated death of a patient suffering from diabetes or tuberculosis would not appear as a case of Sonne dysentery in the mortality returns.

If the suffering of the patient is considered important, many cases of Sonne dysentery cannot be regarded as negligible. It is no slight matter for a patient with a broken thigh, or pneumonia with pleurisy, to be lifted on to a bedpan 8 times in a night, while robust nurses and medical students are often seriously incommoded. Pickles (1939), in his excellent book on *Epidemiology in Country Practice*, remarks on the fact that, while the disease as he met it was usually mild, the " prostrated condition of some of the patients was sufficiently alarming." He goes on to say that the diarrhœa is often extreme, as many as 36 stools being passed in 24 hours; vomiting is not infrequent, and abdominal pain is sometimes of great severity.

While it is for the clinician and (the patient) to judge whether the disease is so mild as to be of little consequence, it is for the bacteriologist to determine the frequency of carriers. Sonne (1915) examined a large number of stools from non-dysenteric patients without finding a single carrier. Blacklock and Guthrie examined the stools of 100 children in Glasgow, at a time when dysentery was common, with negative results, while Cruickshank also failed to isolate dysentery organisms from 72 normal children. I have recently examined 142 stools from children in wards without Sonne dysentery, but no dysentery organism was isolated.

It is generally agreed by those who have investigated this matter carefully that the disease is transmitted chiefly from people who have recently recovered or are suffering from the disease in a mild form, and that chronic carriers are rare. It is, therefore, practicable to isolate the cases and carriers within any properly organised institution.

There can be no question that Sonne dysentery is a highly infectious condition (which is probably connected with the unusually high resistance of organism to certain inimicable agencies), and that

" dysenteric infection, once established in a ward, tends to spread if cases are not isolated." Bloch (1938) states that "institutional infections form a substantial and increasing proportion of the total number of cases" of dysentery, and I maintain that every effort should be made to protect patients in hospitals from this affliction, and failure to do so not only reflects very seriously on the efficiency of the medical staff but should render those responsible liable to prosecution for criminal negligence.

I have written this letter in an attempt to contradict what I consider to be a very dangerous and retrograde teaching which cannot be justified on grounds of expediency.

J. C. COLBECK,
Pathologist in Charge,

Emergency Public Health Laboratory,
Downe, Kent.

Trainees in Pathology

To the Editor of the GAZETTE

SIR,—Judging from what has already passed, my friend Professor Payling Wright is probably justified in his conclusion that further discussion between him and Dr. Shackle would be without profit; but he cannot drop the matter quite so simply. Your readers are surely entitled to one piece of important information that he has not yet given them. On December 28th there was a statement in " Passim " that the Ministry of Health had sanctioned the appointment of trainees in pathology at a salary of £200 p.a. This was the basis of Dr. Shackle's first letter. With an audacity that I can only call superb, Professor Wright then accused Dr. Shackle of factual inaccuracy because he gave to this statement the only meaning that it could possibly bear, adding somewhat lamely that the Ministry had not yet settled what the salary would be. Inasmuch as Professor Wright is the head of the E.M.S. pathology in your Sector and his name was mentioned in the statement, I should have thought that a correction of an apparently erroneous announcement, and even an apology therefor, would have been a more appropriate gesture than handing a raspberry to Dr. Shackle. Moreover I do not understand why it should have jumped to the eye that trainees who are taken on for a course of 18 months by the E.M.S. are likely to be used for military purposes. If this is so, it should be made clear. An 18 months' course will take us well into the middle of 1942, and from what I know of recently qualified men fit for military service they will not jump at the idea of remaining civilians for another 18 months. I am personally very much in favour of the trainee scheme, but I would put it on a military basis, give the candidates commissions and second them for training.

What Professor Wright means when he says that the main issue between him and Dr. Shackle is what should be the main preoccupation of pathologists at the present time I do not know; so far as I can see this has not been touched upon by either of them. Can he tell us now quite plainly what the position with regard to trainees in pathology is? To an enquirer a few days ago, I could only say that the matter was wrapt in mystery and I referred him to his Sector pathologist.

Yours, etc.,
C. W. GOODHART.

Inter-Hospital Boxing

To the Editor of the GAZETTE

SIR,—I should be glad if you could correct an error in your report of the Inter-Hospital Boxing which appears in the *Gazette* of March 8th.

The report calls it an Inter-Hospital championship, whilst in fact it was only an Inter-Hospital tournament. At first sight this may seem to be rather a quibble over nomenclature, but rather more is involved than would appear at first sight.

A championship would involve the transfer of the Cup to the winning team and the supervision of the contest under strict Amateur Boxing Association rules. Neither of these requirements was fulfilled; the Cup was never in jeopardy and weights were relaxed to an almost absurd degree.

The whole object of the tournament was to keep alive the Boxing Clubs of the various London hospitals, and to facilitate the holding of an Inter-Hospital Championship as soon as circumstances allow.

Yours, etc.,
H. B. FENN,
Hon. Secretary.

The United Hospitals Boxing Club,
Guy's Hospital, S.E.1.

Guy's Hospital Gazette

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Sector News

Guy's Letter

THE removal of a delayed-action bomb from one of the small courts adjoining the colonnade has relieved the anxieties of those who treasure the oldest parts of the Hospital. Each of us is grateful to the Royal Engineers, whose skill and nonchalant courage made this possible. A child, caressing its first Easter egg, could not rival the demonstration of affection with which the disposal squad retrieved the Hun's visiting card.

It has been disappointing, during the past week of spring weather, to find the Park still littered with debris of nine months' standing. Beauty in the Borough is scarce enough nowadays, so why, in all conscience, cannot some small effort be made to allow Miss Addiscott's bulbs to grow?

Recently the Rugby Club held its annual general meeting, during which plans for its centenary celebrations in 1943 were discussed. It ought to be of particular pride to Guy's men that theirs is the oldest club in the country. Furthermore, the Physical Society, of similar venerability, is resuming its meetings in a week's time.

The enormous number of lectures now attended by Guy's students is quite opposed to the tradition whereby first-hand dealings with the patient, even in wartime, have been the prominent feature. But this unorthodoxy is as nothing compared with the appearance of notebooks on rounds, in out-patients' and, Heaven protect us, in the theatre. The figure to whom tribute is due is the wartime senior dresser, who embodies the functions of surgical ward clerk and electric lift.

All have been sorry to hear of Mr. Layton's illness and each will wish him a successful and rapid recovery. Mr. Wass, who has been billeting streptococci in his throat, has now returned to duty; in the meantime, it is learned that his garden has made big strides.

The morning following a recent night of casualties found a member of the surgical staff on his round. His horror knew no bounds when, in an X-ray of a skull, he noticed a large and not uncomely foreign body for which no treatment had been carried out. A tall man was he, and, using height and a commanding voice, sent for the registrar, sent for the houseman. Something must be done right then. In an instant the theatre was to be ready, the minions and puppets at their posts as their lord sounded his orders. But they say it was the house-surgeon who knew it was only a Kirby grip.

Mr. Blaikley is known to have said he will break down the door if Mr. Shein has his wireless in the bath again next Sunday morning.

R. T. H.

Pembury Letter

AFTER eighteen months' struggle with sandbags and the weather, in which the latter was declared the winner, a new structure has appeared at Pembury. This consists of brickwork protection for the windows, covering two-thirds of their surface. Owing to a peculiarity of design they exclude 50 per cent. of the light and almost completely prevent the opening of the windows. We cannot help but feel they achieve a similar result to "blasted" windows subsequently boarded up, except that no bomb is required. Of course they provide a good deal of protection, and this will extend to the bacterial inhabitants as well, who will now have nothing to fear from the death-dealing rays of the sun. Our motto is now "Put your trust in God and keep your sulphapyridine dry."

Under the presiding genius of Reynolds, hockey again flourishes in our midst. Several enthusiastic matches have been played, and there are numerous bruised shins and torn muscles to bear witness as to the enjoyment they give the players. Truthfully it may be said that we take our pleasures seriously.

N. M. J.

Farnborough Letter

SPRING as defined in the dictionary will be one day old when this issue of the *Gazette* appears; we do not intend this to be an excuse for any lyrical outburst, but it may be more than a mere coincidence that activity seems at Farnborough to be now reaching a peak. The snowdrops, crocuses and gorse are as colourful here as anywhere, the turf is as fresh, the catkins as furry, but these are not to be our theme. The activity which is nearer to us as we sit in our Mess is that of a large bevy of workmen busy with bricks and mortar. One group is building the new Decontamination Centre that is to replace the present rather makeshift arrangements; it is conveniently located near the main entrance to the Hospital so that contaminated cases can be dealt with there and then proceed quickly and with a minimum of transportation to the admission ward proper. The other group of workers is constructing blast-walls to cover in the ground floor windows ; these will supplant the existing and now dilapidated sandbags which have done duty since the outbreak of war. While we are given to understand by those who ought to know that these walls are excellent from the point of view of the protection they afford, they will undoubtedly add to the already existing difficulties in the way of ensuring adequate ventilation for the wards. So much so that in the receiving ward, where one or more cases of open phthisis and of other airborn diseases may have to remain for several hours, or even overnight, in company of other patients, it is now quite impossible to open the windows to anything like their full extent. Apart from the bricked-in wards the black-out arrangements in other parts of the Hospital so interfere with ventilation that the atmosphere becomes fouled quite soon after sundown, with detrimental results to the comfort of the patients, the efficiency of the nurses, and the well-being of both. The palliative measure at present adopted in some wards is to switch out all lights at intervals and open all doors and windows for a brief spell so as to flush out the used air and admit fresh ; this procedure is, however, at best a " *pis-aller* " and it is devoutly to be hoped that some proper system will be installed before the long nights return next winter. While on the subject of hygiene we recall that the Sonne bacillus is again at large among both patients and staff. Dr. Colbeck is carrying out cultures on a large scale, and we trust that the plague will speedily be eradicated from our midst.

Our original object in opening this letter with a reference to spring was to lead on to a description of " Summerland," but, having filled our space for this week, we shall defer such a project till next week. Those of our readers who are attached to Farnborough will know what to expect ; the rest we leave in suspense.

V. C.

" America Revisited "

By W. H. Ogilvie, Esq., M.Ch.

(*continued*)

In the evening at 6.0 there was a dinner given by the Brooklyn and Long Island Chapter of the American College of Surgeons. It was a very swell affair, one of the few at which white tie and waistcoat were expected, and the gathering filled the Sert Room at the Waldorf. I was on the President's left, between him and Blackman, the chairman of the arrangements committee. The entertainment developed in rather an alarming way, as the room was invaded at coffee by the Press with flash bulb cameras and the President introduced the various guests to the company, while a toastmaster thumped down a microphone on the table before him. I was only able to stammer a few banal remarks, but Lord Dawson on the President's right, who spoke first, gave a charming little speech, courtly and polished yet light and humorous, and exactly right for the occasion and the audience. Time moved on, and as I had the opening paper at 8.0 and still had to place my slides with the lantern man, I was getting very nervous.

My lecture went well, as far as I could see. The lantern man was magnificent, fading the pictures in and out at exactly the right instant, and the audience gave the talk the generous friendly reception they do to any stranger who is not " high hat." It was rather disappointing that the two talks which followed mine, on regional ileitis by Mixter and Crohn, were quite inaudible to me. I had particularly wanted to hear these two men and to get the latest on this subject, but when you sit behind a man talking into a vast space his voice is almost lost, and if you are right under an enormous screen it is almost impossible, crane your neck as you will, to understand what the pictures are about.

On Thursday we spent an idle day as far as surgery was concerned, going a tour round the streets in Dr. Robin's car. Faith and brakes will do wonders unless it rains, and a charming smile and an apology seems to soften the heart of the toughest " cop." At 8.0 Rankin was speaking on ulcerative colitis. We were going on to a party and therefore sat at the back of the hall, where the acoustics were not too good. He gave as indications for surgery intractability to medical treatment, chiefly because of complications : (*a*) perforation, abscess, hæmorrhage ; (*b*) Polyposis ; (*c*) Carcinoma ; (*d*) Focal infective symptoms ; (*e*) Sinus formation or internal fistula ; (*f*) rectal complications, fistula, etc. Of operations, appendicostomy and cæcostomy are useless, and colostomy of little value. Ileostomy is usually done as the first stage of a graded colectomy ; in acute colitis with hæmorrhage it is little use. The ileal efflux always remains loose till the rectum is removed. He does his ileostomy through a muscle split, putting a de Pezzer into the proximal end, closing the distal and dropping it back. He has done twelve colectomies, five for colitis and seven for polyposis. Cattell has done sixteen. The deaths from ileostomy have been 30 per cent.

Slipping out from the hall, we went to join Dickson at a party he was giving at one of the swell hotels whose name I forget. The chief guests were the Behrens, with whom he took me to stay at Erie last year, their daughter and two of their friends. The feature of the evening was an ice floor show. From under a slightly raised platform covered with diners slid a large tray of artificial ice, pipes and all, to cover the whole dance floor, and on this we had a marvellous display of skating, trick, graceful, acrobatic and burlesque by six or eight performers.

Friday was the last day in New York. A farewell to friends; a rush round shops; a drive to Jones' beach, very melancholy and deserted in the winter, in Robin's car, dinner at a cabaret place in Broadway that gives a show resembling but much inferior to that at the London Casino, and on to the *Europa* at 11 p.m. Dickson and Robins were there to see us off, Robins with a bottle of Johnny Walker for the voyage, and the cabin had already flowers in it from the Behrens and the Lewisohns. Away at 12.30, to a voyage marked by calm seas and excellent dinners in surroundings of Arctic gloom; a ship almost empty, rigidly disciplined, and sizzling with the inferiority complex.

(*Conclusion.*)

Sport

Rugby

Guy's v. Rosslyn Park

(*At Old Deer Park on Saturday, February 22nd*).

THIS is one of the very few peace-time fixtures now appearing on the Guy's war-time list, and incidentally one of the oldest, which dates back, to my knowledge, as far as 1889. When most other London clubs found it impossible to carry on owing to losing their players to the services, or having lost their grounds, the Park officials energetically endeavoured to keep the game alive, and we congratulate them on their efforts, as I know they have been faced with many difficulties, but they are always anxious to give a game to Service players on leave.

Both sides made several changes from the selected teams. Guy's for instance. Strathie was unable to play through an injury which got gradually worse during the week. He has been one of our mainstays, and we wish him a speedy recovery and an early return to the side. Brangwin failed to put in an appearance, having gone to H.O.P., and the Guy's captain reshuffled his side by putting Charlton at stand-off, Breen-Turner at right centre, and Matthews, who had an injured rib, in the pack.

Rosslyn Park were not strongly represented. They played Hennesey, a forward, at left centre, shifted Newnham from the " threes " to stand-off, and brought in Huxley in the forwards.

Owing to lack of *Gazette* space it is only possible to give a resumé of the game.

The first half was very even, with the tackling on both sides spoiling any scoring chances. Charlton might have made a try for Gartrell had he passed sooner, but in spite of the attentions of two opponents the latter got through, only to be collared for a touch-in-goal. At half-time there was no score.

In the second half, following a kick by Dillon, the Park's full back, and a run by Hill, a loose scrum in midfield saw Scott emerge with the ball to get clean away, but finding nobody with him went on and on, until Matthews reached him, the latter taking Scott's pass touched down under the posts, but an easy kick was missed.

Play ranged from one end of the field to the other, both sides tackling well. Cornish was almost over from a pass by Steele, and some short passing by Kynaston, Gartrell and Breen-Turner looked promising. Guy's were not handling the ball well at this stage and had some lucky escapes. Mullins went off with blood pouring from his face, having a damaged eye-lid. Cooper, the Park captain, sportingly offered to hold up the game, but after a two-minutes' wait the game proceeded.

Lewis brought off a grand tackle to stop Evans going over near the touch-line. The Park made great efforts to equalise, and did so through a blunder on the part of Guy's from a dropped pass in front of the posts. The ever-ready Steele flashed the ball out, which eventually reached Cornish, who went over for a try too far out for Huxley to convert. Meanwhile Mullins had returned.

Guy's were defending as time was called, but neither side deserved to lose what was a keen, even and interesting game with defence much superior over attack. Our pack played excellently, but the outsides were prone to delay their passes.

Score.—Guy's one try (3 points); Rosslyn Park one try (3 points).

Team.—T. L. T. Lewis; R. F. Camp. J. Breen-Turner, R. U. F. Kynaston (Captain), P. C. Gartrell; D. W. F. Charlton, N. I. Scott; J. D. Everall, R. M. Sharpe, D. N. Fuller, A. G. Albers, J. R. C. Matthews, M. R. Mullins, T. W. Renton, W. F. Swann.

Guy's v. St. Mary's Hospital

(*At Honor Oak Park on Saturday, March 1st*).

HARD luck, Guy's! The size of the score against you was shattering. You did not deserve all that, but you were opposed to an excellent combination, and we do not begrudge your opponnets their success, which they thoroughly deserved. You left many gaps in your defence at critical periods of the second half which contributed to your defeat. We admired your hard and vigorous tackling, and going down to the ball. You were all out, playing yourselves to a standstill, until the final whistle, that is the spirit. It was unfortunate you had to take the field without two key men, Strathie and Sharpe, the latter's hooking would certainly have deprived Mary's outsides having so much of the ball from the scrums.

You will not always be opposed to such star performers as Cockburn, Kemp, Graham-Jones, McCrae and Campbell, and as the 2nd XV, reinforced by five players from Tunbridge Wells, defeated the Mary's second string by 9-3 on the adjoining ground, I wonder whether this is a case of " passing events casting their shadows before," to compensate Kynaston and Mullins for their valiant efforts to restore Guy's Rugby to its former high estate.

Now to the game. Guy's had the wind in their favour during the first half. Mary's attacked immediately, and in rapid succession Mullins brought Kemp down, Camp collared Young, Cockburn was downed, and Kemp again close to our line. Guy's dribbled up-field, but Campbell kicked to touch, and Kemp cross-kicked to McCrae, but Gartrell tackled well. Brangwin intercepted a Mary's pass, made ground and kicked to touch, but some nice handling by Mary's " threes " sent Hamer over for an unconverted try.

Guy's were checked by some hard tackling as they looked dangerous. Gartrell dribbled nicely, gathered the ball, but Swann was tackled as he took the pass. Guy's were awarded a penalty from just inside the halfway line and Mullins kicked an excellent goal, for the half-time whistle to blow with the score 3 all.

Mary's played delightful football in the second half, and were soon on the attack. Some lightning passing by Mary's outsides sent Macdonald over in the corner. Brangwin brought off a nice tackle, and Guy's advanced to half-way. Kemp was well tackled when attempting to break through, but from the scrum Kemp made a determined run through a gap in the Guy's defence and touched down by the posts for Campbell to kick the goal.

Almost the next movement saw Graham-Jones dart over and round to the posts, in his own inimitable style for an individual try which Campbell converted.

Guy's tried hard to break away, but were always well marked. Mary's scored again when Young went over for an unconverted try. Guy's fought back, and Brangwin and Mullins made ground, and eventually Guy's reached the Mary's line for a scrum. Scott whipped the ball out to Manning, who calmly steadied himself and dropped a goal.

Campbell raced up to the wing to be the odd man over from a beautiful three-quarter movement, the corner flag going over in the process, no goal points being added. Brangwin made an effort to break through, and the final whistle went as Hamer of Mary's knocked on with a clear run.

Mullins played a great game, and I hope the players will forgive me singling him out for his inspiring leadership of the pack.

Score.—Guy's, 1 penalty goal, 1 drop goal (7 points); St. Mary's, 3 goals, 4 tries (27 points).

Team.—T. L. T. Lewis; R. F. Camp, P. L. Brangwin, R. U. F. Kynaston (Captain), P. C. Gartrell; F. R. C. Manning, N. I. Scott; J. D. Everall, R. T. Hinde, D. N. Fuller, A. G. Albers, J. R. C. Matthews, M. R. Mullins, T. W. Renton, W. F. Swann.

Hospital Information, etc.

Notice

SOCIETY OF APOTHECARIES OF LONDON

The Society's Examinations for the month of April are as follows :—

Surgery.—April 15th, 16th, 17th.

Medicine, Pathology and Forensic Medicine.—April 21st, 23rd, 24th.

Midwifery.—April 22nd, 23rd, 24th, 25th.

Pass List

CONJOINT BOARD.
FINAL EXAMINATION.

January, 1941.

Pathology.

D. W. F. Charlton
P. W. Edward
P. R. C. Evans
L. P. R. Fourman.
M. F. Gallop
E. J. Grierson
M. P. Hutchinson
R. H. Hughes
J. Pinching
E. Robinson
G. C. Foster Smith
F. G. Stoddart
A. W. P. Stone
A. E. Thomas

Medicine.

*G. J. Amiel
C. L. F. Beaton
J. H. Capon
L. P. R. Fourman
*J. E. Gilbert
*R. A. Gill
*H. P. Jones
*F. R. C. Manning
L. G. C. Martin
*S. Muntarbhorn
*R. E. Rewell
F. R. Russell
R. M. Sharpe
*R. J. Stanley
*P. N. Swift
*St. J. M. A. Tolhurst
*W. R. Watson
J. A. Williams

Surgery.

*G. J. Amiel
P. S. Cuthbertson
*E. B. Dawe
M. L. H. Evans
*B. J. Fowler
*J. E. Gilbert
*R. A. Gill
J. A. Gillett
N. Gillman
*J. C. Holman
*H. L. Joyce
*H. Kanter
F. Kohn
*R. U. F. Kynaston
*F. R. C. Manning
J. K. Martin
*G. E. McFall
*A. J. Patenall
*G. H. Pearson
B. Rowlatt
J. S. Stead
J. G. Stubbs
*R. Tilley
*P. C. Van der Westhuizen

Midwifery.

P. Baxter
A. G. Beaton
D. W. F. Charlton
N. F. Clarke
S. N. Cole
F. M. P. Eckstein
L. P. R. Fourman
J. R. Lauder
L. R. McLaren
J. M. Munden
J. P. H. Ogilvie
D. S. Orr
H. G. Phillips
R. J. W. Rees
H. A. Ripman
F. R. Russell
P. A. J. Smith
A. L. H. Smith
G. W. Taylor
A. E. Thomas
D. I. Thomas

* Have completed the Examination.

ROYAL COLLEGE OF SURGEONS.
L.D.S.
FINAL EXAMINATION.

February, 1941.

PART I.

Surgery.

M. Barber
K. A. Barnett
E. D. Blackie
F. R. Byar-Perry
R. F. Camp
P. Cohen
J. R. Fleming
W. J. Ford
J. H. Forrester
K. E. Gateley
D. A. S. Harvey
H. S. Hargreaves
A. V. Hurst
G. Morris
C. P. Murch
D. A. J. Payne
J. A. Powell
W. L. Renouf
D. G. E. Roberts
W. B. Sanders
N. Stark
M. Suskin
E. H. Wecker
E. D. Whiteley

PART II.

Dental Surgery.

E. D. Blackie
F. R. Byar-Perry
B. M. Cox
A. P. Davies
J. R. Dyer
W. O. R. Evans
A. Halamandres
H. S. Hargreaves
F. E. B. Heesom
R. Howgate
W. H. Hudson
J. A. M. Mitchell
J. F. Mordaunt
H. J. Nicholls
D. G. E. Roberts
H. R. Unstead
J. A. Woodward

Papers by Guy's Men

Mullally, G. T. Anærobic infections and gas gangrene. *Lancet*, 1941, i, 269.

Rowlett, A. E. Health Services for the future of dentistry. *Dent. Mag. Oral Topics*, 1941, **58,** 9.

Smith, R. E. The Ubiquitous Streptococcus. *Clin. J.*, 1941, **70,** 57.

Herbert, W. E. Cases treated by Root Resection. *Brit. Dent. J.*, 1941, **70,** 173.

Changes of Address

Nils L. Eckhoff, M.S., 7, Upper Brook Street, Park Lane, W.1. *Telephone* : Mayfair 3300.

Births

DRUMMOND.—On February 21st, 1941, at Plymouth, to Neilma Drummond (née Lamb), wife of Surg.-Lt. W. J. Drummond, R.N.V.R.—a son.

FORD.—On November 8th, 1940, at Petersfield, to Hilary (née Tomkinson), wife of Surgeon-Commander (D) W. C. G. Ford, R.N.—a daughter.

Deaths

MACLACHLAN.—On February 17th, 1941, Hugh Maclachlan, M.R.C.S., L.R.C.P., of 327, West Barnes Lane, New Malden.

DYMOTT.—Killed by enemy action, George Vivian Dymott, L.D.S.Eng.

TICEHURST.—Claud Buchanan Ticehurst, of Appledore, Kent, on February 17th, 1941.

Eds. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry
and Hospital News.
PUBLISHED FORTNIGHTLY.

Volume LV *5th April* 1941 *Number* 1375

PASSIM

SPRING has been ushered in by a week of cold wind and rain, rendering even more grateful the contrast between the valiant efforts of our rockery and the hideous piles of debris in the park; it has been accompanied however by a lull in our activity at night which has enabled all arrears of lost sleep to be made up and a fresh spate of work to be anticipated without qualms. The recent insistence by Government ministers upon the necessity for preparedness against attack by poison gas is of especial importance to the medical profession. It is not possible for every medical officer or practitioner to attend a special anti-gas course, but it is the duty of all to familiarise themselves with certain features. The main types of gas which can be employed and the means of their rapid recognition, the methods of handling cases before decontamination, and the location of the local decontamination centre, are all of importance to doctors as well as to air raid wardens. In view of the possible overcrowding of these centres or their destruction by high explosives, the essential principles of decontamination, the best local applications to eyes and skins and the mode of treatment of irritant lung lesions, should be well within the bounds of knowledge of the busiest practitioner. Vigorous attempts are being made from above to bring the present system of anti-gas precautions and treatment to a high level of efficiency, but should this weapon be used, then there will be many occasions where the exhibition of coolness based upon knowledge will do much to allay panic. Finally, even more so than in September, 1939, in the carriage and care of gas masks an example of great potential value can be set to the general public.

One of the more distressing features of this war has been the frequent appearance in print in various medical journals of articles describing inadequately short series of cases, usually without effective controls; from such accounts widespread deductions are often made, particularly with regard to the efficiency of different modes of treatment and the results compared with those of experimentation upon animals under conditions bearing only the faintest resemblance to those appertaining in man. The war has given an admirable opportunity for accurate clinical description of traumatic cases on a large scale, and for the employment and investigation of new methods of treatment under conditions vastly more favourable than those prevailing in France during the last war. The more of such descriptions that can be recorded the better, and the publication of only one or two cases is of great value, if there are special points of interest to be recorded; in too many cases, however, the fantasy of deduction has been allowed to over shadow the spirit of scientific investigation. For example, the present vogue for dusting wounds with sulphonamide powder might from some of the literature be regarded as an efficient substitute for surgical debridement in a " dirty " wound or for any surgery whatever in a " clean " wound. This is patently untrue, whatever the guinea-pig may think about it, but to obtain a clear enposition " in print " of the fallacies of this suggested treatment it is necessary to search the literature widely to find sober accounts of investigations which have shown the ineffectiveness of the powder dusted into pockets " unreached by the knife," and also its complete ineffectiveness in wounds made to drain freely; in fact in most wounds other than those which have been surgically excised and then sutured. The question of the relative value and absorbability of the different powdered compounds of this series and the possibility of local tissue reactions, especially of nervous tissue reaction, have also been investigated, but the results apparently ignored to judge by the indiscriminate use of such compounds in many cases.

◆

THE short article, "Farewell to the College," published last week probably will bring back memories to many. In spite of its architectural ugliness, antiquated plumbing, and cold draughty corridors, the College had a homely intimacy for those who lived in it, residents and students alike, and that is sadly missing to-day. We must thank the matron of the College for all that she did to make life more comfortable, to see that the rooms were kept airy and fresh, yet cleansed from the dirt borne by the Borough air. The unfailing courtesy and efficiency of the College porters and the convenience of a restaurant which did not insist upon rigid hours for those who perhaps had been called up several times during the night, or perhaps had just overslept, are now but happy memories to be looked back on until the hospital has again a college of its own.

We are pleased to publish this photograph of the "Wildernesse"

◆

A further generous gift from our American friends "Bundles for Britain" has arrived this week—the magnificent offer to replace the Deep X-ray Apparatus lost in the blitz fire of December 29th last.

The Treasurer intends to commemorate the generosity and sympathy received from these American friends in the name given to our country hospital.

Meanwhile, the Hollywood branch of "Bundles for Britain" have adopted Guy's for special help.

Nosophobia

A Clinical Lecture delivered at Guy's Hospital on Friday, 28th March, 1941,

by John A. Ryle, Esq., M.D.

INTRODUCTORY

IT is an old and natural anxiety of the student that the early days of qualified practice will find him too meagrely equipped with a knowledge of practical therapeutics. The treatment of the individual, the management of a case are indeed difficult things to impart. Your teachers can lay down general principles, but only time and experience and your own wits can complete the instruction. If it were possible for you to absorb the lessons upon which this lecture is based, lessons recovered from the notes and memories of nearly thirty years and which your lecturer is still trying to absorb, you would, I believe, be equipped with approximately one-half of practical therapeutics, for I am about to discuss with you those factors in the distress and illness of our patients for which the appropriate treatment can be summed up in the two words Explanation and Reassurance. How much the sick stand in need of these prescriptions and how much good they can do you are scarcely in a position to appreciate for you have not as yet achieved that close personal relationship between doctor and patient which you will one day come to know and prize.

I have sometimes referred to Pain and Fear as the great primary symptoms. They are what our patients chiefly bring to us. Fear and anxiety, which may be regarded as low-grade continuing fear, are probably commoner symptoms even than pain although they remain more frequently unspoken. Fears and anxieties may be reasonable or unreasonable, but they do not lack a cause. They may be related to external circumstances, to domestic or economic difficulties, to bombs or to the international situation. But they may be related also and are probably more frequently related to the patient's internal economy and his private thoughts about it ; to his symptoms and their possible import ; to the effects which illness or accident may have on prospects, activity or earning power ; to ideas of pain and suffering and their tolerability ; and to ideas of death and dying. Many of our patients, indeed the majority, who harbour fears or anxieties about themselves have no structural disease although they may have definite physical symptoms. Anxiety itself may be the main cause of these symptoms and is in turn aggravated by them. In such case Anxiety becomes, in fact, the diagnosis or the real disease. But we sometimes tend to forget that patients with organic maladies and injuries also harbour fears and apprehensions and then, because they show no outward signs of neurosis, their unspoken troubles (often of a degree and kind to retard progress or aggravate suffering) remain uncomforted.

THE MEANING OF NOSOPHOBIA.

Among the twelve diagnoses which appear most frequently in my case-records Anxiety comes second on the list. In four of the other eleven, including the first on the list, it is an important causal or contributory factor. But there is no disease, whether grave, or trivial, in which fear may not sometimes play a part. Nosophobia is derived from the two Greek words νόσος meaning disease and φόβος meaning fear. It has come to be applied particularly to a morbid dread or neurotic fear of disease, but there is no reason why it should have this limited meaning and I shall here employ it in its widest sense. It can then be used to describe a fear of an existent or a non-existent disease, of a disease which a patient has or thinks he has or fears he may acquire, or of the consequences which disease or injury may bring to him or those dependent on him.

While allowing that there are phlegmatic, insensitive and care-free individuals who make light of their physical disabilities we would do well to presume the presence of some degree of anxiety in nearly every general medical case reporting for diagnosis and advice ; in most acute illnesses in which consciousness is not dimmed ; in most bad surgical cases and accidents and woundings in which the mind is unclouded by the effects of shock and hæmorrhage ; in most cases of sudden bleeding before serious weakness supervenes ; in most conditions calling for the knife, for here the fear of the operation and the anæsthetic aids and abets the fear occasioned by the illness ; and in quite a large proportion of other conditions which to us seem very trivial. Can any of us say that we have submitted to gas for a dental extraction or the incision of a Whitlow without a passing flicker of anxiety ? Can any of us maintain that transient pains and discomforts have never created apprehension in our thought ?

By comforting explanation and reassurance, by minimising fears when there is no reason for them to be otherwise than minimal, by abolishing uncertainties about organic illness in the minds both of patients and their relatives whenever possible, be the illness heart disease, pneumonia, phthisis, appendicitis, cancer or measles, we can bring genuine and sometimes surprising benefits to the mind and to the body through the mind. By demonstrating and relieving the fear factor in the functional cases we can often remove or greatly benefit the disease itself. One has only to recall facial expressions of relief or halting words of thanks or even sudden changes for the better, which are within the experience of every doctor, to feel sure that comfort of this kind, even if it is not always lasting, is an essential therapeutic contribution. The too frequent omission of the encouraging word or the pat on the shoulder is not, let me insist, to be ascribed to hardness of heart or any callous attitude, but simply to a failure to realise that such gestures are needed or through preoccupation with symptoms which seem so far physical as to call only for physical methods of treatment. Even in our resuscitation ward after an air-raid I have sometimes noticed two, three or more people engaged on a fracture or a wound and giving it every care and attention, but without one of them pausing to spend a moment with the patient afterwards to tell him that " it's not too bad, old chap," or " we shall be able to save your limb," or to the chilled and frightened girl " we'll soon have you warmed up and feeling better." It takes no time and it means so much and, having escaped one terror, the poor things ought not to be allowed to suffer a moment of unnecessary dread. We become so familiar with the general appearances and course and prospects of common diseases and so interested in local pathologies that we tend to forget the minds and the prevailing ignorance in the minds of our patients and also that many of them are too timid or incoherent to ask the very questions that would give us the opening we need to set their hearts at rest.

We should remember too the many agencies at work which foster a morbid interest in disease—the daily and still more the Sunday papers, the advertisements of patent medicines, the advice or gloomy talk of friends, the knowledge of the illnesses and deaths of relatives—and that, although in times of health these may be the pepper and salt of life for some gossiping folk, when sickness comes it is their smart which prevails rather than their condiment effect.

TYPES OF NOSOPHOBIA.

Let us now consider some of the more important varieties of this fear of disease, of the prevalence of which we need entertain no doubts.

(1) *Nosophobia may, in accordance with the common usage of the term, take the form of a quite unreasoning fear of a particular disease from which the patient does not in fact suffer, or, alternatively, of an unreasoning fear that he may acquire it.*

The victims of this form of the malady are usually endowed with psychoneurotic or psychotic personalities. Syphilophobia is a well recognised example. It may afflict both those who have exposed themselves to a risk of infection or have never once incurred it. A sense of guilt dependent on faulty or puritanical upbringing may play a part in such cases. The anxiety tends to become fixed and magnified into a central obsession and may be extremely difficult to dislodge. Negative blood tests fail entirely to convince or satisfy the unhappy mind and serious mental derangement may follow. Phobias almost as resistant may be developed for cancer, but the majority of cancer phobias are of a much more manageable order and they do not involve feelings of unworthiness.

(2) *Another form of Nosophobia is the dread of disease as a whole or of some common group of diseases such as the infectious or contagious group.*

This tends to afflict nervous people with a smattering of knowledge about bacteria or the children of anxious parents who have compelled them to lead unduly sheltered lives. Medical students are often the temporary victims of disease phobias of this kind. They may lead to excessive washing of the hands or to misinterpretations of trivial symptoms which become so far magnified as to suggest one or more of the graver pathologies which find illustrations in the museum and the wards and about which the text-books are so graphic. These fears too are unreasonable. Although they may be said to have some foundation in experience they remind us also that a little knowledge can be a dangerous thing. They are usually quickly curable by a careful overhaul and a sensible talk. It is not wise to laugh at them. A student came to see me some years ago convinced that he had a cancer of the rectum because he believed himself to be getting thin. He carried his own photograph about with him and frequently compared it with his face in the glass. I examined and reassured him thoroughly, reminding him that loss of weight in rectal carcinoma was only likely to develop in the later stages and to the tune of recognisable symptoms and signs, and finally appropriated his photograph. When last heard of he was hard at work in a busy practice and, let us hope, relieving other patients of their fears.

(3) *A third and by far the commonest form of Nosophobia is that engendered by more or less defined but unexplained physical symptoms.*

Internal pains may suggest cancer in middle life. Pain in the right iliac fossa promotes fears of appendicitis, not only in patients, but also in their doctors, and has resulted in the removal of countless innocent organs, often enough for symptoms whose closer analysis would scarcely have been consistent with a local inflammatory lesion. Coughs and sweating and loss of weight suggest tuberculosis. Vertigo and aphasic migraine suggest strokes. A fear of going out of their minds is common in the psychoneurotics. Fainting suggests heart disease, of which it is in fact, very rarely a symptom. The vaso-vagal attacks of Gowers suggest angina pectoris or heart failure with particular aggravation by the strange physical sense of dying which may accompany them. In all such cases a confident diagnosis and explanation are the first contribution to treatment whatever other measures may be employed to combat the whole disorder or to correct an emotional situation. These phobias are more reasonable. They are based upon a wrong interpretation of symptoms it is true, but often of symptoms which have taken time to unravel and may have provided the medical profession with difficulties and with indecisions which do not escape the notice of the intelligent patient.

(4) *Nosophobia can often be traced to misconceptions for which the doctor is to blame, to erroneous or incomplete diagnoses, to a simple failure on his part to explain and reassure because he had not appreciated the patient's state of ignorance or apprehension, to a needlessly gloomy or guarded prognosis or to forgetting to give a prognosis at all.*

Fears encouraged by omissions in this way are by no means rare. Other fears may originate in the unguarded public pronouncements of medical men and must then be accounted sins of commission. Whenever possible we should tell our patients that they are going to get better, or, at least, that they are doing well, or, even when we are dubious about the issue, that they are fighting a good fight and that everyone is out to help them. Those physicians and surgeons have always been the most successful who have best inspired hope and courage in the sick-room.

(5) *Finally, with the fear of disease and its pains and penalties, we must include the particular fear of death which illness cannot fail in certain circumstances to promote.*

Busy with the management of a case and with our own anxieties it is strangely easy to omit the necessary word of encouragement to a victim of sudden hæmorrhage or other urgent symptoms, although the whole atmosphere of the sick-room and the expressions on friendly faces unable to conceal their care, not to mention the disturbing symptoms themselves, must serve as danger signals. Oxygen cylinders should be kept out of view when not in use, for oxygen, quite wrongly, suggests only desperate situations to the lay mind. Curiously enough the terrible feeling (not fear) of impending death which is experienced by the victims of vaso-vagal attacks and in some vertiginous seizures and anaphylactic episodes, the angor animi of the older physicians, is rarely, if ever, encountered in those whose lives are truly in jeopardy.

Let us pass now to some case-histories illustrative of these various types of fear.

(i) *Syphilophobia.*—A man aged 35 who had been a prisoner in German hands during the last war for four years was treated during that period for a urethritis, but denied exposure. After his return he was pronounced free from infection and his W.R. was also negative. In the course of the next few years he had much sorrow and loss, his first wife dying in childbirth and his second from a cerebral abscess. A year before I saw him his urethral discharge reappeared. He was treated without a bacteriological examination. My notes state that " he has developed a persistent obsession that he has syphilis. He complains of pains in the sacrum, the perineum, the neck, the eyes and under the finger nails, of flatulence and insomnia and has lost a stone in weight." I discovered a to-and-fro aortic murmur, which was rather disconcerting, refrained from discussing it with him and admitted him to hospital for further investigation with a reassuring forecast. There we obtained another negative blood W.R. and also a negative urethral smear and, better still, a history of three attacks of rheumatic fever in boyhood. He was at the time much comforted by these reports and a vigorous reassurance, but I have not heard how he fared subsequently. The background of a long imprisonment and his domestic tragedies probably played a large part in maintaining his anxiety of mind and conditioning the phobia into which it had crystallised.

(ii) *Syphilophobia.*—A nervous Jew, aged 31, married and with children, developed warts on the hands and a friend told him that they were venereal. He was terrified and began to be physically " sick with worry." Pains in the joints followed and then he thought he had a stricture. He lost energy and all interest in his business and dropped two stone in weight. An opportunity of dealing with his friend would have been welcome.

(iii) *Infection phobia.*—Many of us must have had transitory fears of septic or venereal infection from patients during our student days or afterwards. One contemporary of mine, now dead of a disease which he never feared, developed what amounted to a compulsion neurosis in regard to the possibility of infection. Having washed in the hospital he would wash again in the students' club before his meals, open the swing doors with his elbows, eat his College lunch and then flame the end of his cigarette before putting it in his mouth. The unhygienic condition of the kitchens and dining hall in those days and the fact that the food and the utensils must have passed through many unwashed hands before it reached him, did not seem to worry him. The fact that hundreds of men risked dining in College year after year and took none of his precautions and yet acquired no fell disease also failed to impress him. His nosophobia was distinctly unreasonable.

(iv) *Illness and fear engendered by knowledge of disease in others.*—In the course of one morning's out-patients recently we had two patients with symptoms resulting from this cause. One was a healthy girl of 18 about whose heart some anxieties had been entertained in childhood, although she then had no symptoms. She had recently complained of momentary stabbing pains in the sub-mammary region which did not at all suggest cardiac disease and the examination was negative. Her mother then told us that that the girl had been working for a lady with heart disease. The association of a past suspicion of cardiac trouble and the spectacle of real trouble in another provided the mental basis for the symptoms. The other patient was a young married woman complaining of loss of weight, sweats, dry mouth and multiple bodily pains, but without attendant objective signs of disease. She freely admitted on questioning that her symptoms had all dated from the loss of a friend from pulmonary tuberculosis and that she was living in dread of this disease.

(v) *Nosophobia due to indiscreet pronouncements by medical men.*—I was once consulted by two old spinster sisters who arrived in a great state of trepidation. A distinguished surgeon had given it as his opinion that a diet consisting largely of vegetable foods and carrots would protect against cancer. They had embarked upon his programme, but it had suddenly occurred to them that they might have started it too late in life and that the seeds of cancer might have already gained a foothold. It is not easy to eradicate a disease phobia when it has been prompted by a man supposed by the public to be vested with high scientific authority. Let us hope nevertheless, that I was successful both in relieving their minds and assuring them that their tedious diet was not really necessary.

CANCER PHOBIA.

Apart from its high mortality and, in many cases its relentlessness, cancer has inspired fear in the lay mind because of its supposedly inevitable association with grave pain. We would do our patients and the public a real service if we were to remind them more often, firstly, that cancer in its early stages is becoming gradually more eradicable and, secondly, that it is by no means always a painful disease ; that carcinoma of the stomach, the liver and the bowel, for instance, can all run a painless course (although we know they do not always do so), and that when the disease is incurable and accompanied by pain, a great deal can be done to relieve that pain. There are deaths more miserable than many of the cancer deaths which are not a source of public dread—deaths, for instance, from slowly progressive central nervous disease with loss of speech, power and sphincter control.

In the presence of cancer we are always faced with the problem of whether to tell the patient the diagnosis. No hard and fast rule can be made. Sensitive elderly folk whose days are short, can often be spared the knowledge. Sensitive younger folk, women especially, are better spared it in most cases. Many never ask us for a diagnosis and yet leave us suspecting that they knew it all along. Men with responsibilities and other brave people, both religious and agnostic, prefer to be told and it may be our hard duty to decide for ourselves from what we know of them that this would, in fact, be their preference ; they are then, with our help, in a position to gather their cloak of courage round them and to set their affairs in order. When we decide not to tell dissimulation may not always be easy, but in the case of gastric and colonic cancer it is always legitimate and not untruthful to speak of " a severe ulceration " of a type suitable or unsuitable, as the case may be, for operative treatment. Some patients and especially women with breast cancers, will conceal their disease until it is far advanced rather than be told what they dread at a stage when it is amenable to treatment. Such psychological peculiarities are puzzling, but in the individual case must be viewed with tolerance.

Cancer phobia without cancer is, however, far commoner than cancer phobia with cancer. I have carefully perused the notes of 31 cases in which cancer phobia (without cancer) was the main diagnosis. These are a mere fraction of the patients seen who harboured the fear in some degree. There were 21 women and 10 men. The average age was 50, the youngest 33 and the oldest 75. Thirteen were described as nervous, very nervous or as having had a nervous breakdown on one or more occasions. The physical symptoms complained of were generally of a kind associated with emotional disorder. Thus, 14, with or without a specific mention of neurosis, were the victims of spastic colon or other colonic discomforts, of flatulence, globus or rectal spasm or had had an abdominal exploration. Two patients had duodenal ulcers, and two cholecystitis. One had hyperpiesia.

In six cases, all women, there was a mention of sore or dry tongue or mouth or of altered taste with no evidence of a local cause for the symptoms. In such cases I have come to expect or enquire for a cancer phobia. Is the condition perhaps related to the dry mouth of more acute anxiety ? One case was cured of the symptom and her fears by the interview and another greatly relieved by the assurance given.

Twelve patients in the series had lost a near relative or friend or neighbour from cancer or had intimate knowledge of a case or cases. Two were in the habit of reading articles in the papers or other literature bearing on cancer.

(i) A very intelligent middle-aged layman, with expert knowledge of hospital administration, developed a troublesome lumbo-sacral pain after a blow in the back. On a basis of his medical half-knowledge and a vivid imagination, his age, the persistence of his symptom and a contrast of his present state with his normally good health, he built up an association which seemed to support his fear of cancer. He slept badly and lost a stone in weight. He saw several doctors. He was cured by a single explanation and reassurance. Two years later he was seen for a much slighter anxiety about his heart and again relieved. Later he developed a duodenal ulcer which caused him no serious anxiety and responded to orthodox medical treatment.

(ii) A spinster aged 70 had twice been treated successfully for rodent ulcers. Her brother had died of cancer of the gullet. Her friends told her that she was getting thin. She had lost a stone in weight, but had taken four years to do so. She was given to reading literature about cancer. There were thus several good causes for her fears.

(iii) A married woman aged 61 suddenly developed a bitter taste in her mouth and later cold feelings in the body and slight pains in neck and shoulders. She worried more and more about these symptoms and slept badly. Two distant relatives had recently died of cancer. She had seen a doctor, but had not been given a complete overhaul or a reassurance of the kind she needed. Eight months later her daughter reported that she had been well from the day of the consultation.

(iv) A nervous unmarried woman aged 47 and passing through the climacteric had twice had a nervous breakdown in earlier life. Her mother and paternal grandfather had died of cancer. Two months previously she had begun to worry and to sleep badly because a friend of hers was dying of cancer. Her symptoms included pains in the throat, rectum and vagina. Three years previous she had had a disease phobia in association with abdominal symptoms.

It will be seen from these histories that the fears which we unearth in our patients are often by no means unreasonable and that multiple factors are often at work. We do unwisely to blame solitary causes for most of the neuroses, for other conditioning causes often conspire with what we would like to regard as the prime or central cause. A knowledge of the age incidence of cancer and of cases in the family operating in conjunction with a phase of depressed health and an adverse comment of a friend upon our looks might surely activate the imagination in any one of us.

THE NEED FOR SANER EDUCATION.

Passing now to some general considerations we may observe that the disease phobias are on the whole rarer in the simple folk of the working classes or the country-side than they are among the more sophisticated, the idler well-to-do, the more educated and the office workers. The spread of information to-day is not all beneficial nor is it synonymous with a spread of knowledge. Much of the information is incomplete or ill-digested. Especially is this so in the realms of human anatomy, physiology and pathology. Half-knowledge is always more causative of fears and superstitions than fuller understanding. More than one patient has consulted me for an upper abdominal tumour having for the first time discovered his ensiform cartilage!

Anxious parents fear acute infections and tuberculosis for their children and bring them up in an over-protected atmosphere to their physical and psychological detriment. Occasionally we meet with quite young children who have developed anxieties about disease. I have been told of one doctor who had the normal appendices of all his children removed because he could not face the anxiety of their developing acute appendicitis. Our generation is becoming altogether too body and mind conscious and too disease conscious. It is possible to legislate too much for safety and for health or rather for a state of no-disease which is not really health. It lies in the power of doctors, whether in the course of their daily rounds or in their coming function as educationalists, to counteract this drift towards a more prevalent neurosis. Here is a task I would have you all keep very much in mind for the doctors of the future have a very important part to play quite outside the sphere of what we at present understand by the public health. The better education of the doctor for the better education of the people is an idea we would do well to foster.

SUMMARY AND CONCLUSIONS.

What are the chief practical conclusions to be drawn from these reflections upon disease and the fears which it engenders?

(1) We should assume that every patient coming to us for the diagnosis and treatment of any *internal or indeterminate complaint* carries in his consciousness some measure, small or large, of anxiety about it.

(2) At the earliest possible moment we should let him appreciate that we have an understanding of his trouble and give him as much provisional or final reassurance as we can confidently dispense.

(3) Excepting in cancer and diseases of equivalent gravity which call for modified or guarded pronouncements, we should seek to define our opinions frankly and in simple terms and to describe the plan of treatment and, with as much optimism as possible, outline the prognosis. The secretive doctor is not a helpful doctor.

(4) With neurotic patients and others who are physically sound, but in our judgment concealing anxieties, we should go out of our way to declare the absence of all signs of cancer, tuberculosis or other fear-breeding disease.

(5) In the case of patients with visceral or other symptoms which we believe to be due to emotional causes, we should explain how fear, anxiety, care and worry can themselves be the cause of such symptoms or at least serve as a contributory or perpetuating factor.

(6) We are seldom justified in telling a patient that " there is nothing the matter " but often in saying " there is no organic disease." Nor should we describe a disease as " only nerves."

Such phrases do not convince because they are both unpopular and untrue. They express furthermore our own failure to explain things to ourselves in a rational or physiological way, and also our failure to get behind the curtain of our patients' minds.

(7) Sometimes in suspected heart disease, mental disease or cancer it may be necessary to avoid asking questions about the family history or to seek the information elsewhere. It cannot help a patient with anginal symptoms to recall that several of his forbears died suddenly or a victim of cyclothymic depression to recollect that an uncle and a cousin committed suicide.

(8) Even in the case of the gravest disease and even when the patient knows its gravity, much can be done to lessen apprehension, to foster courage and to comfort distress by our expressed willingness to help and to go on doing all we can to discover the best means of help.

(9) One of my surgical teachers, Sir Alfred Fripp, used to say to his dressers : " If we cannot be clever we can always be kind." I have not met such a contradiction in ideas as a positively unkind doctor, although I have known some who lacked gentleness of touch, or manner, or were handicapped by bad tempers. I have, however, met some who were too pessimistic, or too silent, who were careful enough in their methods of examination and physical treatments, and yet failed to meet their patients with insight and understanding and thereby failed to help them as much as they might have done in their essential task as comforters.

Looking back on personal experience and its slowly garnered lessons one is conscious of many opportunities lost, of judgments gone astray, of faults both of commission and omission, but one is also conscious, as we must all one day become, of a slowly developing faculty for contact with the minds of the men, women and children who bring their troubles to us. In the reorganised medicine which we are now trying to visualise as our contribution to the post-war world, the general practitioner and the general physician especially, but every surgeon and specialist too, must come to give increasing thought to the psychiatric opportunity which is his and which it is his duty and privilege to explore. Instead of becoming an increasing bogey disease must be given its proper place in human affairs. In private and in public utterances the victories over disease by preventive and curative methods should be explained and emphasised and simple truths given constant preference to stupid fads and fancies. Our patients and their children must be encouraged to be interested in health rather than disease and in the natural means of healthy living and thinking.

The true meaning of doctor is teacher. It may be a hard thing to roll into one the tasks of perpetual student, of healer and of teacher, but these are our functions and this is what we must try to do. Medicine becomes increasingly difficult as its boundaries widen and new knowledge crowds in upon the harassed intellect, but in medicine as in other scientific pursuits, the best and most effective methods are commonly the simplest. All I have really suggested to you to-day is that we should more often, more thoughtfully and more thoroughly explain and reassure, and thereby seek to lessen the frequency and the influence of Fear, which is of all symptoms and diseases the most insidious and prevalent.

Sector News

Guy's Letter

THE recent lull in air raids has been welcome indeed. But if the war is now in another quarter there is strife enough in Guy's. The cause of it all is food. Hitler is to blame for most things evil, but sometimes this rascal is made the excuse for a dozen and one shortcomings due to other individuals' wills—or lack of them. Only a fool or a gluttonous traitor would expect his daily diet to escape the hand of war. Equally, only a guileless, palateless sycophant could imagine the food for some provided in Nuffield House to be the result of blockade. And so it is that staff and residents are complaining, and efforts are on foot to see that matters are improved. That is neither all nor sufficient, for doubtless the appetite of the student—to whom the safety of the hospital is in no small part due, is not easily satisfied by yards of macaroni. And what of sisters and nurses ? If an army marches on its stomach, so they do what they do on theirs.

For those of us who liked the dirty old college, it is a great delight to see the old familiar faces of Shipcott and Dialls installed in Nuffield House. It is no lesser delight to see their first efforts on the telephone switchboard. There is, however, one regret. Dennis, the third of the trio, found himself unable to accept the new employment. After twenty-one years' service to Guy's men, there must have been some good reason for this, and we hope the onus does not rest on the hospital, for that would be a pity.

Mr. Norman Neville has now returned to Guy's. He has been coming " tomorrow " for the last two months. His joining Mr. Grant and Dr. Reeve in their work on shock will enable each patient in the resuscitation ward to have a doctor in the bed as well as one underneath and another on top. Furthermore, it is hoped to have an intravenous drip into the cavernous sinus as well as in both arms.

We have always been fortunate in the keenness and stamina shewn in our registrar's teaching. One of our surgical registrars bears the name of Medicine's most famous street—of Cronin's blackest dream. His untiring, increasing outpouring of knowledge by day and by night is famed in theatres as well as in ward. But never before the night of the last air raid had it been heard on the roof of Salomon's centre. This is how it happened. Each night a member of the junior staff inspects the fire-watchers at their posts. On the night in question the bombs fell loud and fast, yet not so fast that the oracle had no chance to enumerate the indications for falling flat upon the face ; for as he said, " Gentlemen, blast might blow you off,—*right*." Hardly had he finished his favourite word when, to illustrate his point, the loudest of whistles threw the firm flat on its face. As all regained their feet, the old well-recognised crescendo was heard, " Mistah fiah-watchahs, you ought to know these things."

R. T. H.

Pembury Letter

HERE is a true story that intimately concerns the Guy's nursing staff. First we must explain that our story covers two children's wards. One at Pembury, the other at Farnborough. The former is a large and busy department, serving the needs of Guy's ; a large area of Kent and a sizeable out-patients of its own. It is well equipped and does a good deal of the complicated nursing and investigations peculiar to pædiatrics. The latter ward is smaller, less well equipped and serves a smaller population. There can be no doubt which one demands the greatest nursing skill.

On the outbreak of war each of these wards was taken over by a Guy's sister with childrens' experience. Soon afterwards the sister at Pembury was promoted to the administrative staff, and the vacancy rightly enough was filled by another sister with a childrens' training. Later, however, a vacancy occured in the Farnborough ward, and this was filled by the peculiar procedure of transferring the sister from Pembury. This latter important ward was then put in charge of a sister with no previous experience of children, and later she was succeeded by yet another also without a childrens' training. We now understand that there is to be a change at Farnborough, and the new sister will be " childrens' trained."

To summarise this complicated saga, it can be said that there have been a great many changes, with the result that the important Pembury ward has for many months been in charge of a sister who through no fault of her own has had no childrens' training. Where Farnborough is concerned, however, there has never been any difficulty in finding a properly qualified sister. This situation seems to require an explanation.

We are very glad to report that Mr. Chapple is again to join us, and we welcome him most heartily. For some time now Mr. Gibberd has paid us regualr visits, so our maternity department is indeed a tower of strength.

In pursuance of the " Dig for Victory " campaign, part of the hospital grounds adjoining the Childrens' Hospital has been ploughed up. We understand that it is to be sown with onions, and we can well imagine this news bringing tears to the eyes of our less fortunate urban fellow men.

N. M. J.

Farnborough Letter

IF signboards had the power of feeling they must surely feel aggrieved at the cruel treatment which many of their number have suffered since the outbreak of war. Some have been taken down, others mutilated, and yet others condemned to the indignity of being snares and delusions. Among these last is one which hangs by the side of a certain main road near London, and bears the words " Summerland House Preparatory School for Boys and Girls." Though Summerland House remains, the laughter of children is no longer heard there, for it has now become a school—not for little boys and girls, but for medical students.

A house agent might describe Summerland as a desirable residence containing two reception rooms, two large and several small bedrooms, plus the usual offices. It is situated in close proximity to the hospital—in fact direct access is now possible through a hiatus in the dividing wall, for which we are indebted to the enemy ; so that the place is eminently suited to serve as a local *pied-a-terre* for the medical school. We are fortunate here in having among us Sergeant Johnson, late of the R.A.M.C., who during the months that he has been working for Guy's has become an important character at Farnborough. Up to the present the Sergeant has functioned rather like a Cook's man at a railway terminus, recording the attendance of the students (and the staff), locating lost rounds, and generally acting as a clearing house for information of all sorts; but he is soon to take charge also of the new annexe. Of the two really large rooms which this contains, one is to be a lecture room and the other a pathology classroom. The latter is to be fitted with shelves to accommodate specimens, and will become a miniature museum. Common rooms are also to be provided, and there is a hard tennis court in the garden which, it is hoped, will shortly be brought into commission. As soon as the black-out arrangements are completed, the house will be opened in the evenings for the use of students, many of whom find their billets rather unsuited for concentrated work. Actually Summerland is already partially in use, but when it is really ship-shape, it should prove a most valuable acquisition to that part of the medical school stationed at Farnborough, by adding to both the educational facilities and the recreational amenities.

We are glad to hear as we go to press that Mrs. Fache, the very popular V.A.D. from Bromley Ward, who was injured and deprived of her house in a recent " incident," is progressing well, and we hope to see her in the not too distant future back again in the ward.

V. C.

Orpington Letter

IT is with pleasure that we can say that one of the fears mentioned in our last letter has not been realised, for Hawkins is still with us. To celebrate his departure we had arranged a dinner-party, but on hearing of his remaining decided that if his going was cause for celebration, his remaining was all the more so, and hence proceeded with arrangements. The party was a great success, attended by the majority of our visiting staff. Unhappily Mr. MacNair could not be with us, due, some say, to his need for rest and quiet after having removed the largest ovarian cyst that he had ever seen. One junior probationer was heard to say on seeing this: " Well, if that's the cyst, where's the woman ! "

Owing to the fact that Orpington has now become an orthopædic centre, together with the influx of air-raid casualties, our bed-state has become a pressing problem, and two new wards are being opened this week. But if our beds are few, our nurses are fewer—ten Guy's nurses and a sister are to join us; not that this fact was welcomed by the authorities here, who declared that we had no need of them.

We sympathise with our nursing staff in Orpington, for the neighbourhood provides little or nothing to do in off-duty hours. To mitigate the ennui, Mr. Stamm gave a musical evening a short while ago, which was well appreciated, while the house officers, in the absence of any students, find it hard equally to distribute themselves and their invitations to the not infrequent mess dances. We do our best!

Many at Orpington are in the throes of exams., and these are not confined to the men, for the Guy's Finals are being held here for the nurses.

Our junior anæsthetist reclined beside me as I write, deep in coma, with a large tome on Anæsthesia rising and falling upon his abdomen.

Actio sequitur esse,

B. D. J.

Correspondence

" Farewell to the College "

To the Editor of the GAZETTE

SIR,—I read with interest the story of the College. For historical interest may I make one correction: Sir Cooper Perry, the first warden, Dean of the Medical School and later Superintendent, was not trained at Guy's, but at the London Hospital, and when H.P. at that hospital, was appointed Assistant Physician to Guy's.

Yours, etc.,

W. M. MOLLISON.

23, Devonshire Place,
Upper Wimpole Street,
W.1.

Guy's Hospital Reports

To the Editor of the GAZETTE

SIR,—I am anxious to obtain early copies of the Guy's Hospital Reports to make up a series. It occurred to me that during a recent turn-out of books, etc., an old Guy's man or his relatives might have considered the disposal of such early copies, and I would be glad to get in touch with anybody who would be willing to dispose of any. I am interested in the years 1836-1867.

Yours etc.,

R. C. BROCK.

Guy's Hospital,
S.E.1.

Trainees in Pathology

To the Editor of the GAZETTE

SIR,—If Dr. Goodhart will refer to the earlier phases of this correspondence he will see that when—to use his own words—I "accused Dr. Shackle of factual inaccuracy," the facts under dispute embraced much more than the terms of appointment of clinical assistants in Pathology. However, since he evidently thinks that your readers are entitled to further information, as to why I objected to Dr. Shackle's tendentious interpretation of the original announcement in "Passim," I will gladly give them more particulars.

The ruling has been made by the Ministry of Health that clinical assistants in Pathology shall receive £100 per annum plus £100 for subsistence, if no accommodation for boarding in hospital is available. For this appointment candidates should have held a house appointment of from six to twelve months, and should be informed that the appointment is for six months in the first place. An individual who has done his house appointment and has done six months' clinical pathology could be appointed as junior assistant pathologist provided the necessary time (i.e., eighteen months) had elapsed between his qualification and the appointment.

The idea that it is proposed to run some special eighteen months' course in clinical pathology is a curiously fanciful one that is entirely without basis. The fact is that the Ministry has established emergency hospitals in many places and wants pathologists. The Services face the task of expanding their medical sides, and they too want pathologists. The present scheme for clinical assistants is merely directed towards trying to give some laboratory training to some recently qualified men to enable them to fill these additional posts. Dr. Goodhart may be assured that there is nothing machiavellian about it. His suggestion that such men should be in khaki is superficially attractive, but would, I think be difficult to work, for the E.M.S. is already a fairly heterogenous body, and to add Service members to it would add unnecessarily to the difficulties of administration.

Those of us who took an active part in the last war are often inclined to interpret the present one too closely in the light of our experiences then. In that war, infantrymen—the bulk of the army—could be trained for trench warfare in a few months. In the present war, gunner, tank and flying officers have far more technical tasks to master, and must have the time to master them if we are to avoid the massacres of the Somme and Passchendaele. It seems to me to be unlikely, therefore, that the Army will call on their medical service heavily for some time yet, and that this is the time to train men for its specialised branches in the place where they will learn fastest, viz., a busy hospital. Dr. Goodhart seems to express surprise that we should be wanting to train men for the summer of 1942. In my view we should be very shortsighted if we omitted to do so.

I hope that this information is sufficiently plain to allay Dr. Goodhart's concern lest your readers be kept in the dark in this matter. But if he wishes for further amplification I will try to supply it.

Yours, etc.,

G. PAYLING WRIGHT.

"Graded Meals"

To the Editor of the GAZETTE

SIR,—Resident medical staff, sisters and students, have for a considerable time been fed in Nuffield House. Every day a menu is posted revealing the deplorable state of affairs whereby the standard of meals deteriorates in that same order of seniority. At least the housekeeping authorities make no secret of their favours, except that the menu consumed by the housekeeping staff themselves is not published.

Now is there any reason why the standard of meals is so graded? Is there any reason why the sisters (and nurses who are graded with the students) who are often required to spend long arduous hours on duty, should have food inferior to medical officers, who have the opportunity of supplementing their meals by frequent or occasional visits to local hostelries? Do those responsible realise the invaluable work which the students have done and are doing to maintain the hospital in these difficult days—the very fact that the hospital is here at all is largely due to the students and works department, who have put in superhuman work on more than one occasion. And yet they are offered macaronie cheese as the basis of many an evening dinner. "We are all in this together," and if adequate supplies for proper feeding for all are not available, should not all share alike?

I have, Sir, no personal grouse to voice, for I am a member of that superior grade, the resident medical staff (and by choice I not infrequently visit a well-known local hostelry); but I feel it is full time a proper investigation and re-arrangements were made. Neither, Sir, do I curry favour, so I may perhaps be excused if, enclosing my card, I prefer to remain,

Yours, etc.,

FAIR PLAY.

A Case from Take-in

THE following case is recorded on account of its rarity and the interesting diagnostic problem it presented.

A lady aged 54, the mother of nine children, was admitted to Guy's Hospital complaining of a large painful swelling in the left side of the abdomen.

Two years ago she noticed a lump the size of an egg in the left iliac region. This was followed by pain of a " pinching " character which radiated diffusely over the left side below the umbilicus. The pain was colicky in nature. It became worse, radiating upwards, and the lump became bigger, so that the patient took to her bed for two days. During the attack she was constipated. While in bed on the second day she took a purgative and after this she was " crippled " with pain. Her bowels opened. The lump disappeared and the pain subsided.

Since then the patient has had many similar attacks lasting for about five or six days. At first they were separated by intervals of four or five months, but the intervals have become rapidly shorter and recently the pain and lump have been present more often than absent. Sometimes the lump has been present for as long as two days before any pain has developed. The patient was able to assist the departure of the swelling by rubbing it gently, and as it disappeared she could hear gurgling noises. She was always constipated during the attacks, which were relieved when her bowels opened. She has never vomited.

Five days before admission the pain and swelling returned, but purging and massage failed to alleviate her symptoms.

The pain was extremely severe, the patient being unable to walk or even move. She called in her doctor for the first time during the illness and he sent her up to hospital.

On examination the patient was a stout woman with a large flabby abdomen. She did not appear to be in great distress, though she complained of pain when her abdomen was palpated. There was a swelling in the lower half of the abdomen on the left side. It was the size of a large grapefruit, situated over the left internal abdominal ring and extending upwards and outwards from that point. It was soft and tender. There was slight resonance over the swelling, but the note was not as tympanitic as the rest of the abdomen. On contraction of the abdominal muscles by the patient raising her head, the lump was still palpable but not so definite in character as when the muscles were relaxed. It was difficult to be certain from this physical sign whether the lump only lay deep to some of the layers of the abdominal wall or whether the general flabby nature of the whole abdominal musculature gave rise to this impression. There was no impulse on coughing. Peristaltic sounds were normal. Nothing abnormal could be felt per rectum or per vaginum.

From the history of definite symptoms related to the alimentary tract it was assumed that the swelling consisted of bowel. Again, the early history of disappearance of the swelling suggested a hernia, yet from the physical signs this must be of the interstitial type. A pre-operative diagnosis of inter-stitial hernia was made.

The alternatives considered were intermittent volvulus of the sigmoid colon and diverticulitis. Against intermittent volvulus was the absence of complete intestinal obstruction with its associated systemic upset ; the absence of gross abdominal distension and the fact that the swelling was apparently not intra-abdominal. Against diverticulitis there was only slight tenderness of the mass, no overlying rigidity and no pyrexia.

The abdomen was opened through a left sub-umbilical paramedian incision. The rectus muscle was very thin and there was a great deal of fat in the abdominal wall. The pelvic colon was found protruding through the internal opening of the left inguinal canal. It was pulled back into the abdominal cavity. It was congested and there were small petechial hæmorrhages in the fat around it. The sac of the hernia was filled up with a gauze sponge. An oblique incision was made in the left inguinal region. The aponeurosis of the external oblique muscle was exposed and incised. The sac of the hernia, filled with gauze sponge, was found lying between the external and internal oblique muscles. The internal oblique was in such a poor condition as to be almost absent. Part of the sac had descended a short way down the inguinal canal, but the greater part had travelled in an upward and lateral direction between the internal and external oblique muscles. The sac was opened and dissected from the surrounding structures ; extra-peritoneally at the neck of the sac part of the bladder was found. This was pushed back into the abdomen and the sac was tied off at its neck and removed. The internal oblique was sewn down to Poupart's ligament with silk, completely closing the inguinal canal. The two incisions were then closed without drainage.

The patient made an uninterrupted recovery.

Sport

Rugby

Guy's v. London Hospital

(*At Honor Oak Park on Saturday, February, 1st*)

GUY'S had no difficulty in beating London Hospital in the return game at Honor Oak Park. I am not sure whether London were strongly represented, but they had no idea of the composition of their side until all the players had arrived, which indicates they are experiencing some difficulty in getting their forces together. Guy's were as strongly represented as possible, there being one or two changes in the pack, and Macrae-Gibson came in at right centre.

Early in the game Guy's were penalised and Newcombe kicked a goal to give London the lead and incidentally their only score of the match.

Strathie broke through several times and tried to open up the game, but the London tackling was keen and faulty passing stopped Guy's making headway. Camp went over for a beautiful try, receiving the ball from Macrae-Gibson, who gave a perfect pass as he was tackled. No goal points were added.

An excellent movement ended in a scrum, the ball passing from Strathie to Macrae-Gibson, back to Strathie and then to Camp. London attacked, but Strathie relieved by kicking to touch. Camp made a nice zig-zag run, but his pass was fumbled. Strathie cut through in grand style, and Mullins took the pass to heave himself over the line for Kynaston to add the extra points. London had a chance to reduce the lead from a penalty which was missed. Half time arriving with Guy's leading 8-3.

London faded out during the second half and Guy's set up a commanding lead. Guy's missed two penalties in rapid succession, and from a loose scrum Macrae-Gibson cut through to the corner for an unconverted try. Macrae-Gibson was almost over again but was tackled just in time.

Some splendid handling by the " threes " ended with Macrae-Gibson scoring again, and Kynaston kicked the goal. Guy's were getting the ball from most of the scrums and the outsides were able to keep up the pressure. Sharpe went over for a snap try from a move by Strathie, and Kynaston did the necessary. Guy's forwards were indulging in some short passing and from one of these movements McCall raced over to touch down under the posts, Kynaston again converting.

Some nice passing by Strathie, Mullins and Sharpe ended with a dropped pass, but the ball came right across field and Gartrell made a wonderful corkscrew run to score under the posts, and with the last kick of the match Kynaston kicked his fifth goal.

Score.—Guy's, 5 goals, 2 tries (31 points); London Hospital, 1 penalty goal (3 points).

Team.—T. L. T. Lewis; R. F. Camp, A. C. Macrae-Gibson, R. U. F. Kynaston (Captain), P. C. Gartrell; D. M. Strathie, N. I. Scott, J. D. Everall, R. M. Sharpe, G. M. Evans, T. R. Wooldridge, J. R. C. Matthews, M. R. Mullins, T. W. Renton, A. M. McCall.

Guy's v. Wasps

(*At Sudbury on Saturday, February 8th*)

GUY'S had something to play for in this game as they were all out to avenge a defeat the Wasps inflicted upon them in November. They went on the field determined to beat the Wasps forward, knowing full well our outsides could be relied upon to beat the opposing three-quarters. How well their plans succeeded is indicated by the subsequent play and final score.

The ground was in a dreadful state and one patch in front of the stand resembled a ploughed field as the game progressed. Guy's made further changes to strengthen the pack, and brought in Lee and Swann for the first time, and right well they played and thoroughly justified their inclusion.

The tackling in the early stages was hard and vigorous, but Guy's were getting the ball from the scrums and the outsides had some chances. A beautiful movement in which the ball was handled by Brangwin, Strathie, Kynaston and finally Gartrell, had the Wasps defence all at sea, and the latter had a clear run to the posts. Kynaston missed an easy goal, but to kick the ball a couple of yards was an effort, to boot it over the bar needed a super shot.

The Wasps indulged in one of their famous forward rushes and reached the Guy's line for a scrum. The whole pack shoved over the line, and the scrum-half touched down for a try, which was not converted. It was a ding-dong struggle for mastery. Gartrell made a long run on the line handing off as he went, but a bad pass spoilt a good chance. Camp intercepted a pass, ran strongly, and side-stepping the full back touched down for a grand opportunist try in the corner, no goal points being added.

It was a hard battle forward, and both packs dribbled in turn. Wasps nearly went over, but Clary hesitated and was promptly tackled. However, the Wasps drew level as Clary went over from a forward rush.

At half-time the sides were level at 6 all.

During the second half our forwards took command, and Swann dribbled and kicked beautifully on the rain-sodden ground until he reached the line to touch down for an excellent try. His last kick at the ball nearly sent it over the dead ball line. Mullins made a superb kick but was just short.

Strathie, Swann and Sharpe were responsible for the next score, and the latter selling a perfect dummy crossed for a try. Mullins made a wonderful kick from ten yards inside the touch line to land a peach of a goal.

Guy's were superior in the line outs and the Wasps resorted to taking scrums without any advantage. Strathie punted across to Gartrell, but he was given off-side. Some beautiful handling by Brangwin, Mullins and two other forwards whom I could not distinguish led to Fuller scoring in the corner. Some dropped passes and fumbling nearly led to the Wasps scoring. Guy's were hard pressed but kept their lines intact, until another hefty shove by the whole of the Wasps pack saw Edney touch down.

The Wasps were compelled to touch down following a dribble by Mullins, Sharpe and Swann. Camp and Kynaston in turn looked dangerous, but were tackled. Guy's finished the game with a splendid try by Camp, the ball came from Strathie to Brangwin, the latter's pass was very low, but Camp gathered miraculously and ran clean through to the posts deceiving two defenders in the process. Mullins was able to add the extra points.

Score.—Guy's, 2 goals, 4 tries (22 points); Wasps, 3 tries (9 points).

Team.—T. L. T. Lewis; R. F. Camp, P. L. Brangwin, R. U. F. Kynaston (Captain), P. C. Gartrell; D. M. Strathie, N. I. Scott; J. D. Everall, R. M. Sharpe, A. B. Lee, J. Breen-Turner, J. R. C. Matthews, M. R. Mullins, D. N. Fuller, G. F. Swann.

Hospital Information, etc.

Pass List

UNIVERSITY OF CAMBRIDGE.
FINAL M.B. EXAMINATION.
Michaelmas Term, 1940.
PART II.
Principles and Practice of Physic, Pathology and Pharmacology.

G. E. H. Enderby. W. B. D. Maile.

Papers by Guy's Men

Denny-Brown, D. Delayed Collapse after Head Injury.: Case Records. *Lancet*, 1941, i, 371.

Knott, F. A., and Leibel, B. Prevention of Pyrexial Reactions in Intravenous Therapy. *Ibid*, 409.

Symonds, C. P. The Neurological Approach to Mental Disorder. *Ibid.*, 337.

Changes of Address

J. B. Hine, Flying Officer R.A.F. (V.R.), c/o Midland Bank, Westbourne Grove, W.2.

W. B. D. Maile, Flying Officer R.A.F. (V.R.), Andover, Hants.

E. L. Graff, Flying Officer R.A.F. (V.R.), c/o 9, Weymouth Street, W.1.

R. G. Green, Lt. A.D. Corps, Crewkerm, Somerset.

G. N. Wood, Capt. R.A.M.C., No. 4 Command, c/o A.P.O.

The Services

Mentioned in Dispatches

Flight-Lieut. Edward Conrad Gross.

Casualties in the Medical Services

Captain Thomas Ellis Mitchell died at Birmingham, aged 34.

Births

SILVER.—On March 5th, 1941, at Nunsthorpe Maternity Home, Grimsby, to Dorothy, wife of Philip Silver, M.R.C.S., L.R.C.P.—a daughter.

Deaths

EDGAR.—Killed by enemy action, Niel Edgar, L.D.S., and wife, London Road, Enfield.

JAMES.—Oswald P. James, L.D.S., Goring Road, Llanelly Carm., March, 1941.

MITCHELL.—Thomas Ellis Mitchell, Capt. R.A.M.C., of old Hill, Staffs., March 1941, on active service, aged 34.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry

and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV | *19th April* 1941 | *Number* 1376

PASSIM

RECENTLY, there has been a significant increase in the incidence of tuberculosis, especially among children and adolescents. While this is a direct contradiction to the reports circulated in the daily press and elsewhere, one has only to consult the Infectious Diseases Notification Book in the front surgery to prove it; new cases of tuberculosis are apparently as common as all the rest of the "fevers" put together, and this has been the case for the last month. It is interesting to note that most of these recent cases of tuberculosis have assumed the adult pulmonary form with a meningitic sequel in three instances.

To a large extent, what has happened is due to war-time conditions, with the air-raid shelters standing out as the main causative factor; these are crowded, unhygienic, draughty and poorly ventilated. As a result, respiratory infections in particular are easily caught and once contracted become chronic and spread like fire through the unsuspecting communities, leaving undermined health and debility in its wake. While it would be unwise in these columns to enter into a political discussion concerning the compulsory evacuation of civilians, it is necessary, as a public health measure, to draw attention to the desirability of segregating unhealthy members of crowded groups of people. Now that civilians are playing such a significant part in this war, there is no reason why shelter recruits should not have the same routine physical overhauls just like any person in the Services. Instead of giving him a twopenny ticket of admission to his underground cave, it would be better if he and everyone else around him were given a clean bill of health before being allowed to enter. In this way disease would be spotted early and when recognised adequate precautions could be taken; in this way the adult type of tubercle could be controlled and prevented from infecting exposed children.

The shelters are by no means entirely to blame for the rotten state of affairs that exists; in point of fact a large share of the responsibility can be pinned directly on the fever hospitals. While the necessity for pushing cases out of hospital as soon as the quarantine period is over must be sympathised with, one cannot justify the discharge of patients with broncho-pneumonia and in an otherwise debilitated condition just because their measles have subsided. Nevertheless, this is exactly what has occurred, and coinciding with it has been the exacerbation of dormant tuberculous foci, again most commonly in children and adolescents who suffer most from the various exanthemata. The necessity for keeping a close and regular watch on children during their critical convalescent period must be realised by all fever hospitals so that a more favourable outlook may be achieved.

◆

This issue of the *Gazette* is a special number devoted to Book Reviews. The multitude of new books and new editions that have appeared since the war has entered its acute phase, may be regarded by some as a questionable tribute; but when it comes to deciding between enforced idleness and productiveness, the latter is much the best, and for this reason the authors must be congratulated upon their excellent contributions to medical science and knowledge. The need for up-to-date text books is now greater than ever before, because many teachers are no longer engaged in teaching, and also because students are scattered about in base hospitals and accordingly must rely more upon themselves and reading for their medical education.

◆

A very wise suggestion has been made; it seems inevitable that a certain number of medical libraries will be destroyed before the end of the war. Consequently, if local and foreign journals were to print and set aside an extra set of copies of each issue, then when these libraries come to be reestablished the cost of certain replacements will be much less than that which would result from reprinting back numbers of old journals.

ERRATUM: In the letter written by Professor Payling Wright on p. 85 of our last issue: " . . . . . that clinical assistants in Pathology shall receive £100 per annum," should read "£200 per annum, plus £100 for subsistence," etc. We must apologise for any inconvenience that this misprint has caused our readers.

Observations on Air Raid Casualties

A Clinical Lecture delivered at Guy's Hospital on 4th April, 1941, by R. T. Grant, M.D.

GENTLEMEN,—In my last lecture I tried to show you how little we know about the condition known as traumatic or wound shock, and I tried to impress on you the need for further clinical observation and experiment with a view of finding better criteria for the diagnosis and prognosis, and better methods of treatment. The matter is full of difficulties, as an experience of air raid casualties soon shows, and we are yet far from knowing "all about shock." But it may interest you to hear a brief account of our observations so far as they have gone.

First of all let me summarise part of the ground covered in my last lecture and review shortly the present state of our knowledge about shock.

There is said to be a condition of *primary shock* which occurs soon after injury but which is not always associated with severe injury and may occur without injury. Some confusion exists as to what clinical condition this term should be applied. Some describe primary in the same terms as secondary shock, but the present trend is to regard primary shock as of the nature of a prolonged faint or vasovagal attack. Its chief clinical features are said to be a low blood pressure and a slow pulse associated with pallor, sweating and nausea. Primary shock is said to have a nervous basis, pain and emotional factors playing an important part through their influence on the cardiovascular system. The heart slowing is thought to be due to stimulation of the vagus, and the low blood pressure to a vasodilatation leading to a pooling of the blood in the vessels, specially in the splanchnic area. This type of shock tends to pass off spontaneously, but is said sometimes to persist and to pass into secondary shock.

Secondary shock is thought to be quite distinct from the primary. It is a state of collapse which follows two or more hours after a severe injury, and is characterised mainly by low blood pressure, a small rapid thready pulse, pallor, cyanosis, sweating, a fall of body temperature, rapid shallow breathing, and an apathetic mental state. Associated with these phenomena is a low blood volume, even though no hæmorrhage has occurred. The low blood volume is said to be due essentially to loss of plasma from the blood vessels, as is shown by an increase in the hæmoglobin percentage and in the red cell count or volume.

This clinical picture of secondary shock is said to resemble in many respects that provoked by a severe *hæmorrhage*; the chief difference being that in hæmorrhage the blood is early diluted by fluid withdrawn from the tissues into the vessels so that the hæmoglobin percentage, red cell count and volume are reduced rather than increased, the amount of the reduction, when full dilution has occurred, being a rough index of the amount of the blood loss. Hæmorrhage and secondary shock are said to be often combined, and then the blood may show no dilution or concentration though the total blood volume is reduced.

Following these ideas the treatment of shock and hæmorrhage seems to be relatively simple, namely, the restoration of the blood volume by blood or plasma transfusion or by the administration of fluids by the mouth or rectum and by protecting the patient from cold, pain, anxiety and apprehension. The attempt to raise blood pressure by vaso-constrictor drugs does no good. Operative measures should be postponed as far as possible till the patient has recovered from the shock, and the anæsthetic of choice is said to be gas and oxygen rather than ether or chloroform.

Now let us leave these rather theoretical aspects and consider what is actually to be seen in injured patients. Any observant student, well up in his book work but having his first experience of air raid casualties, would notice—or at least ought to notice—several things. He would notice not only how frequently the patients are said to be "shocked," but also how nicely the examining officer can assess the degree of shock as mild, moderate or severe even after no more than a cursory examination, but no doubt as the result of experience. If the student then examined the patients for himself he would wonder in many cases on what the diagnosis of shock was based, for only in a small minority of cases would their condition easily fit the description I have outlined above. Moreover, he would find that while some cases of so-called " shock " recover well with only rest and warmth and perhaps also morphia and little or no fluid given intravenously, others, apparently not differing in their clinical condition, go downhill and die in spite of large quantities of blood and plasma being added to the blood volume and although their injuries do not involve any obviously vital part of the body.

Six months ago those of us who are studying the condition were in the same state as a new student today. We knew our book work but had little or no practical experience of injured men, women and children. We soon found that theory and practice did not agree, and that while according to the common usage of the term " shock " seemed to be frequent, yet we could seldom identify it as the shock of the text book. We found it hard even to recognise hæmorrhage in this. Thus experience soon showed that very rapid or slow pulses are uncommon, and that hæmoconcentration, on which such great stress is laid by some writers on shock, is rarely met with except in special cases like those of severe burns and in crush injuries to the limbs. We therefore discarded our preconceived ideas and sought to learn what our hands, eyes and ears could teach us. Now we have had considerable experience of air raid casualties and are still far from any clear conception of the nature of the collapsed state or states which our patients show. Our classification of the patients remains rough and ready and provides no very good diagnostic or prognostic basis. Our treatment remains largely a matter of trial and error, and is all too often ineffective. However, I shall recount briefly what we have seen in patients said to be shocked, and the general line of treatment we have come to adopt.

In the first place it is convenient to group our patients according to the state of the systolic blood pressure and the pulse rate. We have three main groups, those with systolic blood pressure—

(1) within normal limits—100 to 140 ;
(2) above normal, over 140 ;
(3) below normal, under 100.

Each of these may be sub-divided into three, according to pulse rate : (*a*) moderate, 70 to 100 or 110 beats per min ; (*b*) slow, under 70 ; and (*c*) rapid, over 110. I may add that the majority of these patients showed also evidence of peripheral vasoconstriction ; they were pale, their extremities—hands and feet, nose and ears—being cold, many were sweating more or less profusely, and some were nauseated and vomited. The majority were mentally clear and rational, few could be described as apathetic. Their wounds varied from trivial cuts and scratches to extensive and fatal injuries. In none that we examined did we find evidence of concentration of the blood. It is clear then that in practice the diagnosis of shock is not based on what is stated in the text books, and may mean little more than that the patient is cold, looks pale and anxious, that he has been emotionally disturbed by his experience, and has been chilled by exposure. We soon learned, moreover, that in the present state of our knowledge the best guide to the patient's condition is the state of the blood pressure. That does not mean of course that other features may be left aside. The pulse so far seems an unreliable guide. In particular, it is to be realised that a barely palpable pulse does not necessarily indicate a low blood pressure. In one instance I have in mind, that of a young man admitted with a compound fracture of the leg, and who was pale, cold and anxious, and whose radial pulse could hardly be felt, the sphygmomanometer revealed the brachial blood pressure to be no less than 180/95 mm. Hg. This is an example of an intense vasoconstriction. A similar association of feeble pulse and raised blood pressure is often met during a transfusion when the patient is about to have a reaction. As the transfusion is being given the patient is becoming warmer and his colour improving, the pulse becoming stronger and the blood pressure rising, you may notice that the skin becomes once more pale, the pulse becomes again feeble or impalpable, the patient complains of feeling cold. Simultaneously blood pressure rises steeply even from low to high levels, and then the patient begins to shiver. When the reaction is over the patient is once again more quiet, colour returns to the skin, sweat breaks out, the pulse becomes stronger and the blood pressure returns to its former level.

The majority of the patients in the first group, those with normal blood pressures, are not seriously affected, and they soon recover with rest and warmth. They require to be watched, however, for their condition may deteriorate, the blood pressure falling more or less rapidly to low levels. In fact, we have come to realise that a normal pulse rate and normal blood pressure are compatible even with a severe loss of blood. For example, a man of 18 was recently admitted three-quarters of an hour after injury, with multiple severe lacerations of the legs. He was neither pale nor sweating. He was mentally clear and talked freely, recognised and shouted to a mate in a neighbouring bed; his blood pressure was 120/70 and the pulse rate 94. Examination of the blood shortly afterwards revealed a Hb. of only 50 per cent., and estimate of the blood volume by the plasma dilution method amounted to no more than $3\frac{1}{3}$ litres. The normal volume should be about 5 litres.

About the patients in the second group, those with raised blood pressure, I will say little now. They include examples of patients already suffering from hypertension, but they also include instances of a temporary hypertensive reaction to injury. The blood pressure may not return to normal for several hours or days; on occasion it may fall to low levels within an hour or two, and these patients also require watching. Hypertension may be associated with severe or slight wounds and occasionally with no wound at all. I observed a blood pressure of no less than 225/145 in a man who had fallen into the Thames. It had fallen to normal levels, 130/65, by the following day. As I have said, hypertension may be associated with pallor and coldness and a weak radial pulse, and so lead to a diagnosis of shock.

The majority of patients, however, diagnosed as shock, fall into the third group—those with low blood pressure; and the majority of these again into the sub-group of those with moderate pulse rates, between 70 and 110. Pulses faster and slower than this are not commonly encountered. The cases with low blood pressure and slow pulse correspond to what is called the "primary" shock of neurogenic origin that I have already mentioned. This small group certainly includes cases with minor wounds and no sign of hæmorrhage or reduced blood volume, and which recover more or less quickly with rest and warmth. But it also includes cases of severe wounds and of grave hæmorrhage. The group of those with low blood pressure and rapid pulse not only includes cases with severe wounds and grave blood loss, but also those with minor wounds and apparently normal blood volume.

This, then, is a brief description of the state of our patients admitted to the resuscitation ward. From the observations made in the last war, it was said that the lower the blood pressure and the more rapid the pulse, the graver the outlook and the greater urgency for treatment by transfusion. While this may have been a useful working rule then, it is not of great value in the present circumstances In the last war we were dealing almost entirely with soldiers, young and healthy males, and these when wounded did not usually come under observation for at least five or six hours or longer. Now we are dealing with men, women and children of all ages and all conditions of health, and they are admitted quickly to our hospitals, the great majority within an hour-and a-half after injury. So often do we find exceptions to our estimates of state and prognosis that in practice each case requires separate consideration, and we are guided not so much by the state of the patient on admission to hospital but rather by the progress during the first few hours.

Before dealing with the treatment of the cases, I should like to refer to two other points.

The first is the frequency with which a temporary suppression of urine occurs in wounded patients. In many of the cases no urine is passed for, say, fifteen to thirty hours after injury. It is not a retention of urine, for the bladder does not fill up, and in those who die it is found to be almost empty of urine. When the flow is re-established the urine is found to contain albumen, red cells and sometimes casts for a day or two. In certain special cases the kidney damage is more profound and death may result from renal failure. The cause of the renal disturbance is unknown. We thought at first it was due to renal ischæmia arising from low blood pressure, but we have since noted that the anuria is displayed by cases whose blood pressure remains within normal limits while they are under observation.

The second point is that the more we see of these patients the more we become impressed by the part that hæmorrhage seems to play in producing their collapsed condition, and the need for improving our methods for estimating blood loss. As I have told you we cannot rely on pulse or blood pressure as an indication of hæmorrhage, for they may be within normal limits even when much blood has been lost. The colour of the skin and mucous membranes is of little value as they may be rendered pale by local vasoconstriction or by the drainage of blood to other parts of the body. An indication may be got, for example, from the state of the dressings, by measuring the amount of blood lost at operation, by soaking dressings, etc., and subsequently noting the volume of water and estimating its hæmoglobin content. Some indication may also be obtained from the state of the blood. A single estimation of the hæmoglobin is usually of little value; of greater value is a series of readings which may show a progressive dilution of the blood. The standard methods of estimating blood volume—the inhalation of CO and the injection of a dye—vital red or Evans' blue—are hardly suitable for severely injured patients; among other objections they require either the active co-operation of the patient or are too time-consuming. Two other methods are at our disposal, namely, to estimate the concentration of the hæmoglobin, the number of the red cells or their volume immediately before and after the rapid intravenous injection of measured amounts of plasma or concentrated red cells. If these methods were accurate they would be particularly suitable for "shocked" patients; the addition of plasma or red cells will do no harm if the patient's blood volume is normal, and do good if it is reduced. They are, however, liable to serious error and on occasion may give fantastic results. For example, in one case already mentioned the hæmoglobin before and after giving 540 c.c. of plasma intravenously was 50 and 43 per cent. respectively. The blood volume is calculated by the simple proportion—

$$\frac{\text{B.V. c.c.}}{\text{B.V.} + \text{Plasma added in c.c.}} = \frac{\text{Hb. after}}{\text{Hb. before}}$$

and the answer is 3317 c.c.

It is to be remembered, however, that by usual methods the estimation of hæmoglobin is at best correct to only about ± 2 per cent. So that in this example the hæmoglobin before and after might really be 52 and 41 per cent. and the blood volume 2,012 c.c., or else 48 and 45 per cent. and the blood volume 8,100 c.c. There are in addition other sources of error which I will not now discuss, and which as I have said may lead to fantastic results. For example, in another case the hæmoglobin percentage before and after giving 568 c.c. of plasma were estimated to be 78 and 76 per cent.; calculation from this gives the blood volume as 21,584 c.c., a result which if true would surely indicate the need for free blood letting rather than transfusion. The method, however, is attractive in its simplicity, rapidity and applicability to such cases; it remains to be seen if the sources of error can be traced and controlled to render it even approximately accurate.

A word or two now about how we deal with these cases. In the first place I would emphasise that if we are to learn from our cases and to improve our methods of diagnosis, prognosis and treatment, we must observe our patients carefully and continuously and record fully what is observed. In my last lecture I told you briefly the points to be watched for, and I need not repeat them here. We want to replace impressions by facts and to test and reform our theoretical considerations by these. Some of you have helped us in making and recording such observations. You will probably have found the work exacting and tiring, but I think you will also have found that it is excellent clinical training and lends interest to the cases.

As soon as the patient is admitted to the resuscitation ward he should be transferred from the stretcher on which he is lying to an already warm bed; the clothes should be removed, disturbing the patient as little as possible, cutting the clothes off if necessary with a large and sharp pair of dressmaking scissors. His general condition should be noted, his wounds examined, not only in front but at the back, special attention being paid to small wounds of the trunk which might penetrate the chest or abdomen; look for evidence of hæmorrhage and note any sign of crushing or swelling of the limbs or of gross nerve injury. Serial readings of blood pressure, pulse and respirations should be begun. The patient is covered with an electric cradle and left in peace though watched carefully. By this time one should have made a rough estimate of the gravity of the case, have decided whether or not an operation is required, and whether it should be done immediately or later. Bear in mind that in most cases, from the surgical point of view, the earlier the operation the better for the patient. One should have decided also whether or not transfusion should be begun at once, and whether morphia should be given. Up to this stage there should be very few exceptions to this routine. Some medical officers, however, to minimise disturbance of the patient, prefer as a rule to leave the patient on his stretcher or at least to leave his clothes on until he has partially recovered; some go so far as a rule not to remove the clothes till the patient is in the theatre and under an anæsthetic. But in my experience this is rarely necessary and in most cases not advisable. In the first place the green stretchers are extremely uncomfortable to lie on for any length of time, even when padded with blankets and for a healthy unwounded man; patients left lying on them soon complain of aches and pains in the back and limbs. Again, if the clothes are left on important wounds are easily missed, bleeding may occur unnoted, and the heat from the cradle is prevented from reaching the patient so that he too long remains cold. An important point is that a patient not undressed tends to feel neglected, specially when his clothes are filled, as they often are, with dust and rubble, and are wet with blood or water. It is obvious, of course, that if the patient is gravely wounded, waxen pale and pulseless, and has sighing or gasping respirations, the thing to do is to transfer stretcher and patient to the bed, raise the foot of the bed, rip up a sleeve, get into a vein and begin transfusion at once, undressing and examination other than to look for bleeding being left till later. But apart from such an extreme case the routine should be roughly as I have outlined it.

From now on, as I have said, your patient must be carefully watched. If he is in a fit state you may question him about the circumstances of the injury, attend to his wants, let him smoke, encourage him to drink, note how much he consumes, but do not disturb him unnecessarily. Don't take pulse and blood pressure every two or three minutes—every quarter or half hour is usually enough. The apparatus I have already shown you, namely, the sphygmomanometer cuff with a stethoscope diaphragm incorporated in it, allows you to note blood pressure and pulse rate with little or no disturbance of the patient, and without withdrawing the arm from the bed. Note any changes in skin temperature and colour, sweating, vomiting and so on. Note whether tall or short, fat or lean; note pain. Reassure your patient about his state.

Many patients will do well with no more than rest and warmth and morphia, and are soon ready to undergo operation. On the other hand, a normal blood pressure may fall or a low one remain low or fall lower and further treatment becomes necessary. Try the effect of raising the end of the bed. This may result in immediate or gradual improvement which may or may not be maintained. If there is reason to think that the blood volume is reduced, or if you want to exclude a reduction in blood volume as a factor in the case, note the change in hæmoglobin produced by the intravenous injection of plasma or concentrated red cells. If the blood volume is found to be reduced, continue transfusion till the supposed loss is made up. For transfusion use a needle inserted through the skin rather than cutting down, exposing a vein and tying in a cannula. With experience there are few cases in which cannulation is required even with a restless patient. But in certain cases, and specially when the need of transfusion is urgent, the veins are not seen or are so constricted that it is difficult to insert a needle; then don't waste time making repeated attempts; cut down and cannulate.

In cases of severe hæmorrhage give whole blood rather than plasma, otherwise plasma seems to be equally effective. In any case if much plasma is given remember that this will dilute the blood considerably, and it is desirable to prevent the hæmoglobin per centage falling below 50. Remember also that if there is no urgency, fluid can be restored to the body almost as rapidly by drinking or by rectal injection. The rate at which a transfusion should be given depends on the circumstances of the case. Some medical officers prefer to run the fluid in very rapidly at the rate of 1 pint in five or ten minutes. At times this may be necessary, quickly to restore a much depleted blood volume. Sometimes however rapid transfusion may cause the patient to become restless and distressed. In one instance the rate of transfusion was increased from a moderate drip to a rapid flow on four occasions, and each time the patient became restless, quietening down again when the rate was slowed. Moreover, there is some evidence to show that the rise of blood pressure accompanying a rapid transfusion is not always maintained, whereas with a slower injection of fluid the rise of blood pressure is more gradual but sustained. A usual rate is 1 pint in thirty to forty-five minutes, and this as a rule is satisfactory. As regards the amount of fluid to be given intravenously, remember that the intention is to restore a reduced blood vloume, and there is no advantage so far as I know to be gained in giving more than this—there is rather a danger of harming your patient by embarrassing his circulation and causing a pulmonary œdema. If the blood volume has not been estimated and if there is doubt as to how much fluid should be given to a patient, it is a good plan if improvement has begun and continues to cut down the rate of transfusion to see if improvement is maintained. If not the rate can be increased once more. In practice it is found that if improvement has not begun after 2 or at most 3 pints of fluid have been given, there is little likelihood of it happening with further transfusion. The number of cases that fail to recover in spite of intravenous therapy is great enough to show that we have yet much to learn about transfusion. In any case that has required transfusion it is a wise precaution to continue the transfusion as a slow drip when the patient undergoes operation. For experience shows that such patients are liable to collapse during or soon after an operation, especially if blood is lost or the operation is prolonged; speeding up the rate of transfusion may then effect a rapid recovery and avoids the delay involved in starting a fresh transfusion.

Finally, a word about deciding when the patient is fit to undergo operation. No very clear indication can be given for this and we still find ourselves advising operation sometimes early and sometimes late with unfortunate results. As a rough guide it might be said that in general operation should be carried out when the systolic blood pressure has reached 90 mm. Hg., and this level is maintained or is surpassed during the next half-hour. We know that if a patient's blood pressure has not risen to about 90 mm. Hg. systolic, he is apt to collapse and die when moved to the trolley, or under the anæsthetic or early in the operation; we known also that if you wait too long after the patient has apparently been resuscitated, deterioration may set in, the favourable opportunity for operating having been missed.

It should be understood of course that the patient should be closely watched during operation; indeed collapse within twenty-four hours is not uncommon. Then all too often further transfusion or indeed treatment of any kind proves unavailing.

In conclusion, I would point out that the understanding of the condition of " shock " is important not only for this time of war but also for the practice of medicine and surgery in peace. The same states of collapse are met in street and factory accidents, as a result of surgical interference, and in various states of disease. I would point out also that in spite of all the work that has been done we still know remarkably little about how adequate circulation is maintained in the normal man. A certain amount is known about several of the factors responsible, but we are largely ignorant as to how these factors are correlated. In particular, we lack simple bedside tests that we can apply to any case in which the co-ordination has broken down, tests by which we may detect the fault and which would indicate the appropriate treatment.

Sector News

Guy's Letter

TOMORROW is April 16th, the change over of the student appointments. To those who leave Guy's for the country and those who take their places, we bid farewell and welcome. Though the last three months has not been easy the air-raid duties have been carried out admirably; despite the distraction the conjoint examiners have suffered a heavy defeat at the hands of their candidates, but they were particularly insistent on the Pathology front.

A month back, we had occasion to remark on the eye-sore of the débris in the park. Since then, the spring weather and the appearance of bulbs has done nothing to accustom us to this disgrace, , and we marvel at the retention of so much scrap metal at a time when the German armoured divisions are causing depressing B.B.C. news bulletins. In fairness, it must be said that the Government shew no special alactricity in providing for the collection of valuable rubbish.

Mr. Ram, who has been staying in Nuffield House lately, has now departed for India, having been commissioned in the I.M.S. Our best wishes for a safe voyage go with him. It is understood that his uniform was *in toto*, although Mr. Silas Clark's designs on the magnificent dress cap were widely known. Tramping feet and the shout of hoarse commands have been heard coming from the roof and corridors of Nuffield House. All these have deen due to the drilling of Mr. Ram by Mr. Clarke in bowler hat and Cheltenham tie and Shipcott of the " old b-Coldstreamers and Crimean b-War, Sir."

The gas scare is taken with commendable seriousness at Guy's. For some weeks now, between 11 and 11.15 on Wednesday mornings, we have worn our respirators, or if virtue lacked smoked our pipes in our sitting-rooms. But now the preparation is the greater. We have seen in the park men in hideous protective clothing, and though we know Nelson Burgess was among them, for some peculiar reason he was neither the centre of attraction nor conducting tours of bomb damage. No, what caught our notice was a diminutive figure giving shrill orders, all-knowing and all-wise. His badges of rank were like that of no cinema attendant, and we could only conclude that four stripes meant some sort of superior N.C.O., or were no more than pieces of litmus paper.

Several nurses have been appointed to the dignity of a blue uniform. Whilst offering them our respectful congratulations we are reminded of W. S. Gilbert's lines about the King of Barrataria :—

> " So to the top of every tree promoted
> everybody.
> When everybody's somebody then no-
> one's anybody."

All housemen hope soon to be on the honarary staff.

The serious effects of the loss of the College become more apparent each day. The nightly return from the West-end or the George causes the transmission of strange sounds from the front surgery to the resuscitation ward, with dissatisfaction all round.

The matron is recruiting suitable hands for lopping branches off trees. She acts as her own foreman, and Professor Ryle was seen to be hard driven on Easter Monday morning. It is significant that he did not return in the afternoon.

Mr. Leibel is becoming as interested in acute appendicitis as he is in land girls.

Farnborough Letter

HERALDED by a spell of icy weather, a recrudescence of 'flu and the measles, Easter is once more upon us. No season-able glut of eggs or hot cross buns has cheered our hearts this year, but a long string of cars outside the Fantail seems to indicate that some folks are contriving to fall in with Mr. A. P. Herbert's injunction to be gay.

The Hospital itself is quiet and deserted, so that presumably many of its inmates are also being gay elsewhere. The whole atmosphere is quite unconducive to work, for not only is it Easter, but the students are changing over. The new firms are expected on Wednesday, but information as to their number and designation is singularly difficult to obtain. Lists have arrived and been cancelled with such regularity that everyone is just resigned to taking what is coming to us. Doubtless the distribution of students under existing circumstances is a matter of considerable difficulty, but it does seem a pity that uncertainty should persist until the last minute since this inevitably results in a lag before the newly appointed clerks and dressers can get into their stride. However, by the time this letter appears in print some students will probably have arrived—so to them we wish a happy and profitable stay; and the same to any shipwrecked mariners who may arrive later.

Last week in Bassett's House the local branch of Guy's Hospital Musical Society gave a concert. The musical talent of the nursing and medical sides was marshalled, and an excellent programme prepared and executed. A discriminating member of the audience who we met afterwards was enthusiastic about the whole concert, and singled out for particular praise the chorus-work under the direction of Trethowan, the singing of Sister Tucker, the oboe-playing of Mason and the rendering on the piano of some pieces of Debussy by Mr. van Meurs.

V. C.

Pembury Letter

AFTER Sir Kingsley Wood's "Keep the Change" budget, Pembury is settling down to earn enough money from the government to pay its income tax.

Since our last letter, a students' recreation hut has been opened. Here may be obtained the atmosphere of a combined "Spit" and College dining room. Such accommodation was sorely needed, and we congratulate the medical school on delivering the goods. The Dean and Mr. Hughes (the rural dean) took an active part in arranging the details, and from fragments of their conversation that came our way, we believe "The Men of Harlech" were a match for each other.

Of recent times a new melody has been heard at Pembury. This is due to many hammers metalling and insulating a room for a "short wave therapy" plant. This can, of course, be well understood, as we have no such plant, and we believe there is no immediate prospect of getting one.

N. M. J.

Correspondence

A Plan for a Post War Guy's

To the Editor of the GAZETTE

SIR,—At present much is being written in the National journals on the future of Medicine, and it seems appropriate to discuss amongst ourselves the post war position of Guy's. As there is no immediate prospect of reconstruction, we have the advantage of being able to talk freely, unencumbered, by the grim realities of finance, politics and what not, that will confront those who will eventually build anew. We propose therefore to describe our conception of an ideal post war Guy's. It is for others to tear us to bits, and make their contribution.

First we must decide what function Guy's is to fulfil. Personally we have no hesitation. It should be a *Teaching* hospital—to teach students, house officers, junior staff, senior staff and perhaps in some degree the world. The latter of course means advances in medicine in general, and so we find teaching includes research. This definition is important, in that it means Guy's will no longer be a voluntary hospital, nor will it be concerned with the number of it's patients. Variety alone will count. The treatment of the masses will be left to non-teaching hospitals. If we accept these foundations, we can proceed to build the superstructure.

We cannot advance at all until we have discussed finance. If Guy's is to be ideal, it will be expensive, at least as compared with non-teaching hospitals. To obtain enough money we must abandon the effete, voluntary system, mobilise what money we may already possess, and supplement it by an adequate State grant. We shall then have partial State support and we must accept partial State control. Thus being financially stable and free from the bogey of bankruptcy, we can proceed to other details.

The position of the staff now engages our attention. They would be required to have two attributes. An undoubted ability to practice their profession, and an equal ability to teach it to others. The one without the other is useless in a teaching hospital. There will, of course, be those whose primary work is research, and they need have no responsibility nor flair for teaching. Both positions will of course demand full time service to Guy's, and therefore cannot be honorary. They will carry an adequate remuneration, rising in accordance with length and satisfaction of service. Private practice, if any, can only be allowed on a very restricted scale, with due safeguards to the hospital's work. Election to the staff must not be a means of developing a private practice or the provision of a sinecure for slackers.

The junior staff will be required to have embryolically the same attributes as their seniors. They too will be paid a reasonable salary with increments. They would be appointed for three years with the possibility of reappointment for similar periods. Their function would be to assist their seniors. They would not be required to control the indexing and correction of reports. For this purpose there should be a limited number of registrars backed by an adequate staff of clerks. The reports would be the work of house officers, with additions by the registrar. Under this system, the reports might be worth the paper they consume. The students' reports would not be filed; but returned to the writers for their own records.

Supporting this clinical staff there must be a laboratory service on a completely new scale. It should be vastly increased from its present size. We visualise it as a department prepared to fulfil the following requirements :—

1. The routine investigations of patients.
2. The routine teaching of laboratory subjects.
3. Facilities for pure laboratory research.
4. Facilities for research in co-operation with members of the clinical staff. It should be remembered that advances in medicine are almost impossible without this latter provision.

Having defined the position of the staff, we can proceed to the question of patients. Beds will be allocated to departments solely on teaching requirements. The admission of patients will be on the same basis, and therefore selective. This means that many of Guy's out-patients will be diverted elsewhere for treatment, and other selected cases will be admitted from non-teaching hospitals. Thus the numbers of septic ulcers, herniotomies, tonsillectomies, etc., will be drastically reduced, and their places taken by a wide selection of other cases. This doesn't mean that only interesting cases will fill our beds, but that at any given time there will be a variety of acute cases : those needing investigation and some of those chronics and neurotics, which though important, have been like the plague to voluntary hospitals. In other words, a representative cross-section of medicine. This will allow the student to see a wide range of diseases during each appointment, instead of relying on luck and the whims of his seniors.

The function of out-patients will be both teaching and consultative. No patient will be seen without a proper doctor's letter, and O.P.O. out-patient's will be swept away, and replaced by a modified form of general practice, where the student can learn much of that side of his profession. These principles make it clear that Guy's will no longer be basically for the sick of the Borough ; but then it hasn't been so for decades past. Let us recognise it.

Finally, the position of students. Their number would be governed solely by teaching facilities, and their selection by ability alone. They will be at Guy's to be taught, and not to perform the duties of porters and record keepers. This will enable them to have definite terms of work, and periods of vacation, the latter refreshing not only themselves, but also those who do the teaching. We have purposely not mentioned the nursing staff, for they require an article to themselves.

Thus do we visualise our Utopian Guy's. A teaching hospital, financially stable, with all its advantages in equipment, buildings and treatment. It would produce worthy doctors, taught their profession instead of forced through examinations, and there would be reasonable hope of it making contributions to the advancement of medicine, comparable to those of Bright and Addison.

Yours, etc.,

" COSMOS."

Guy's Hospital,
S.E.1.

" Farewell to the College "

To the Editor of the GAZETTE

SIR,—The recent letter of P. M. F. Bishop in the *Gazette* entitled " Farewell to the College " has interested me greatly, as I have a very distinct recollection of the opening by Mr. Gladstone in April (or May ?), 1889, and of his wonderful oratory on that occasion.

The College of those days, being a nice clean red brick building among all the somewhat squalid surroundings of the Borough, appeared to us—who were, perhaps brought up in a more severe school than the present generation of students—to be the last word in luxury, and a very agreeable contrast to the rooms, perhaps in Trinity Square or Kennington, where many Guy's men lived.

I can claim to be the first Guy's student to live in the College, as I went to live there a few days before the opening, together with a few residents, such as R. H. Ince, now Major-General Sir Richard Ince, K.C., M.C., R. S. Freeland and J. Young, who were all extremely kind to me, a raw youth in his first year, and with some of whom a life-long friendship has continued.

We were shortly joined by a few students, who came up for the summer term : E. T. Shorland, R. B. Stamford, H. T. Hinton and C. H. Fagge, some of whom have now passed away.

The correction of Mr. Mollison regarding Sir Cooper Perry is quite correct, though I am under the impression that Sir Cooper, when translated to Guy's, was acting as medical registrar—or in some other staff appointment—at the London.

Yours, etc.,

R. H. FAGGE.

P.S.—I should have mentioned that Guy's was the first hospital in London to have a residential college, and in this, as in many other questions, was in the forefront of progress. It is to be hoped that when happier days come, a suitable building in healthier surroundings may be erected, which will be worthy of the Hospital and of future generations of Guy's men.

Burgh Lodge,
Melton Mowbray.

" Fair Play "

To the Editor of the GAZETTE

SIR,—I should like to make it clear that I am not the author of the letter in your last issue, over the signature of " Fair Play."

Yours, etc.,

H. J. B. ATKINS.

Air Raid Distress Fund

To the Editor of the GAZETTE

SIR,—The response to my appeal on behalf of students and others who lost personal property during the fire raid of December 29th, 1940, has been most satisfactory and I have received £49 5s. 6d. for distribution. I have tried to write personally to all those who contributed and who sent me such very nice letters with their contributions. I can assure your readers that we who are working here at Guy's are most appreciative of the concern and interest in our welfare which have been expressed by so many loyal sons and daughters of Guy's.

I have distributed as fairly as possible the money I have received, and I am quite sure that the recipients would like me to thank all the donors and to express gratitude for their generosity.

It is good to know that the Guy's spirit still flourishes in these hard days when there seems so little place for sentiment. Let us hope that we shall never forget our motto, " Dare quam accipere."

Yours, etc.,

P. M. F. BISHOP.

Guy's Hospital,
S.E.1.

Books on Surgery for Dental Students

To the Editor of the GAZETTE

SIR,—The booksellers tell me that it is difficult to find new copies of any book suitable for Dental students studying General Surgery. I should like to make an appeal to any old Guy's men, who happen to have copies of Surgery for Dental Students that they can spare, to send these to the booksellers for resale, or to send them as gifts to the Wills Library, where they can be loaned to students.

Yours, etc.,

N. L. Eckhoff,

Lecturer in Surgery to Dental Students.

Guy's Hospital,
S.E.1.

Re Food

To the Editor of the GAZETTE

SIR,—We have read with interest the controversy (*re* food) in the latest editions of the *Gazette*, and think that perhaps the Guy's staff (both male and female) may be interested in a few facts about the food here at Orpington.

To quote a very recent instance. Eight sisters arrived ten minutes late for dinner one evening, and were greeted with the fact that there was no more meat left ; somewhat irate, they demanded food, and after an interval a dish containing sixteen unfortunate sardines arrived, to be consumed by the eight hungry—and equally unfortunate—sisters. It might be added that to ask for a second helping on any occasion is to ask for gold.

It is considered extravagant to provide both porridge and a second course for breakfast, the result being that porridge and bread (with one's butter ration) is breakfast twice a week, and if it occurs at the end of the week when one's butter ration is low or non-existent—well, that's all there is about it. On other days one gets a boiled egg, or perhaps a potato cake which takes the united effort of knife and fork to part it. The mid-day meal, on more than one occasion, consists of sausage meat (which is unrationed) in some form or other, failing that, bully beef.

Our complaint rests not only with the sisters' and nurses' food, but with the food sent up for consumption by the patients.

On one occasion—a Monday—a newly-arrived sister dared—and I mean dared—to send down to the kitchens for more potatoes (the lunch for patients on full diet being soup), and was told that patients were not supposed to have potatoes and soup. There is no discretion shown in quantities ; two sisters, one ordering for forty and one for ten patients, will both receive identical quantities of food.

We hope our readers will not think this is an exaggerated account, as all the writers can quote many more instances of the same sort.

Yours, etc.,

THE EVACUEES OF ORPINGTON.

Orpington War Hospital,
Kent.

Reviews

Fears may be Liars. By JOHN A. RYLE, M.D. Published by Messrs. George Allen & Unwin : London, 1941. Pp. 96. *Price 3s. 6d.*

THIS is a beautiful book ; and the product of a beautiful mind ; we may be proud that it is a Guy's man that has written it. This needed courage ; for the educated members of the community have not, for many years, taken any part in the guidance and education of the people in the philosophy of life and of what precedes and follows it. Dr. Ryle says we must change this and must again bear our part, as our forbears did, instead of leaving these entirely to the ministers of the churches. This will not be easy. When the ideas of the two groups about death and God were identical it was easy for them to work in harmony ; but since these of most men and women with a modern education have diverged from the traditional beliefs it has been difficult ; they have not wanted to interfere with those whom they have felt should be the teachers of these things, and they have shrivelled up, except for an honourable few, into the shells of their daily tasks at the disapproval of the orthodox.

Death, pain, and fear.—These are the matters with which Professor Ryle deals, shewing that they are physiological, and should be approached in the same way as any other physiological subjects. The consideration of death leads him to a discussion of what happens after death, and he has put forward clearly, and beautifully, that conception of immortality which has in the minds of so many silent witnesses replaced the old ideal of personal survival. This is a book for all, and it is not for a review to detail its contents which all should read personally and carefully ; but it may be allowed to suggest amendments in three points of terminology.

It would be well if the word " agnostic " were kept strictly to its original meaning. It denotes a frame of mind, and it connotes a suspension of judgement, which are quite distinct from any accepted formula and faith and for which we need a word. It was created by Huxley for this purpose, at the request of the dignitaries of the church who could not understand how a man could hold independent views without a label. It describes exactly the mind that is not made up. There are but few agnostics today amongst men and women of mature age. They have now reached some new " Gnosis " that gives them peace, or have returned to the old one from which they set out. It was different some eighty years ago, when new knowledge was coming along so fast and was so rapidly disturbing ideas that had been accepted for centuries as infallible that a wise suspension of judgment was a proper thing. But while few remain agnostics into middle life it is well for everyone in early manhood or womanhood to pass through the fire of agnosticism. The faith that has been doubted is the stronger for it. " The agnostic," says Professor Ryle (p.59), " is not necessarily an irreligious person." This might be put with greater truth thus : " The agnostic is necessarily a religious person," and whether he returns to his ancient faith or becomes what Dr. Ryle styles a rationalist, he remains one.

It is a mistake to write (p. 28) that " Darwinism has long since superseded the first chapter of Genesis." It is evolution that has done so. In eight years time we shall be commemorating the centenary of the publication of the Origin of Species. Now this great work did two things, but the enunciation of Evolution as a doctrine was not one of them. This dates from Thales. What the Origin did was, with Huxley as the apostle of evolution, to compel every educated man of that time to consider it. But the book also put forward an hypothesis to explain evolution. This was the hypothesis of natural selection, and it is to this that the term Darwinism may be applied. There are to-day but few people with a modern education who do not believe in evolution; but many of them are by no means convinced that natural selection is the process by which this has come about, and prefer to keep an agnostic frame of mind upon the point. This sentence should therefore read " Evolution has long since superseded the first chapter of Genesis." Whether it has is very doubtful. It is surprising how many there are that have no idea how to think in its terms. We of the medical profession are all biologists and we cannot imagine anyone so ignorant of biology that they do not know anything about evolution. Yet there are many who have had a good education, and even what they would call a modern education, who are profoundly ignorant of all biology and know nothing of evolution. The Origin of Species is not yet one hundred years old and man's mind in the mass works very slowly.

We need to replace the word " rationalist " by something else such as " Christian of the New Culture," for there are in this country today two cultures based upon Christianity. There is the old that is represented by the traditional teaching of the churches, and the new. Many members of the former have denied the title of Christian to the latter; and the latter not being very interested in titles have in the past accepted this. But till yesterday there was not any alternative to the Christian ethic in any part of Western Europe or the New World. Now there has arisen a sect, a party, or a race that have returned to the worship of the anthropomorphic dieties of a bygone age with an ethic that is the complete antithesis of every principle enunciated by the Master. It is necessary that all who uphold his teachings should unite under a single flag, and everyone who believes that the conduct of man, personal, family, social, and international, should be based upon the principles that He laid down should claim the title Christian. It is the rules of conduct in these teachings that are the essence of Christianity, and not the varying hypotheses as to the teacher's nature, or of the personal survival of the taught.

Dr. Ryle has shewn in this little book that of those members of the educated classes who should again bear a part in the guidance and education of the people in the philosophy of life, the medical profession must take a leading part, for what is to be taught has a close relation to what we should do in the treatment of our patients.

T. B. L.

A Short Textbook of Midwifery. By G. F. Gibberd, M.B., M.S., F.R.C.S., F.R.C.O.G. Published by Messrs. J. & A. Churchill Ltd. 2nd Edition. *Price* 18*s*.

MR. GIBBERD as a teacher of obstetrics needs no introduction at Guy's Hospital; for many years his lectures have been known by students to be supremely lucid. The first edition of this book was hailed with pleasure, for it set forth in print his excellent teaching with this same clarity of expression as marked his lectures.

It is a testimony to the popularity of the book that we see, at the end of only three years, a second edition. The book is indeed ideal for the student; it is concise (531 pages of text), has excellent illustrations, and as has already been indicated, the author nowhere leaves any doubt as to his meaning. This new edition includes a section on the physiology of the fœtus, based on the work of Sir Joseph Barcroft, also extensive reference to the work of Dr. H. L. Sheehan on the morbid anatomy of obstetrical conditions, while the chapter on contracted pelvis includes a paragraph on the " sacral angle," to which attention was drawn recently by Malpass and Hamilton. The book has, in fact, been thoroughly revised and brought up to date. The standard of the text is uinformly good, but that dealing with hyperemesis gravidarum, contracted pelvis, and puerperal infections is outstandingly so.

It is to be hoped that this book will remain " A Short Text Book," and so continue to take its place among those few books on which a student grounds his knowledge. It is also to be hoped that one day we may see a system of obstetrics by Mr. Gibberd, written in an equally clear but critical manner. It should also prove an outstanding success.

J. B. B.

Surgery of Modern Warfare. Part 4. Edited by Hamilton Bailey. Published by Messrs. E. & S. Livingstone. *Price* 12*s*. 6*d*.

IN his note to Part 4 the editor attempts to forstall reviewers by claiming that when differences of opinion are expressed by various contributors, these are entirely intentional and not a manifestation of his " inability to control the team." In the present Part he cites the question of amputations; there is certainly need for some explanation of the incongruous differences of opinion expressed in the two chapters on this subject. The reader is told that when he has assimilated this "easily digested material" he will be "better able to correlate his previous teaching"; but some foods are notoriously indigestible, and to correlate diametrically opposed views is a superhuman task. The experienced reader will either smile or grunt, and proceed along his own sweet path, but the inexperienced reader will find himself in an impossible situation. Is he to believe that ". . . . limb-makers, like others, putting pride before profit, can by ingenuity and care overcome the difficulties of fitting an unorthodox stump" (p. 524); or that the dictum "The surgeon amputates and the limb-fitter must do his best with the stump" is fallacious (p. 549)? In almost every type of amputation described he will be unable to decide what is the optimum length of stump desired; a good example is provided when on p. 555 he reads "A thigh stump should never reach a lower point than 4 in. above the adductor tubercle"; and on p. 538 "As a matter of fact 2 or 3 in. above the *knee* is a better level for the division of bone." Is he to pull down, crush and ligature the nerves (p. 526) or believe that ". . . . nerves, therefore, should *not* be shortened or in any way traumatised" (p. 553)? How is he to correlate the teaching that "Syme's amputation is undoubtedly the best operation in the lower limb" (p. 544), with that of p. 556: "For civilised man, however, it is not satisfactory"? The answer probably lies in the very term "civilised man," for in spite of the exhortation to the reader to "keep his ideas fluid," it is difficult to keep fluid ideas which solidified at the end of the last Great War. If we are to have modern warfare let us have modern surgery, and not be quoted examples of the surgery of 1891.

In Part 4 the section on wounds of bones and joints is completed. The remaining chapters on wounds of joints are adequate, and that on compound fractures is good. Enough has been said of the chapters on amputations to realise that nothing but chaos and confusion can arise in any alimentary tract which attempts to digest and absorb them. This is an infinite pity when the Roehampton school has done so much to improve the results of prosthetic surgery in these cases. The chapter on wounds of the face and jaws is excellent. Wounds of the orbit and eyeball are dealt with by ophthalmic specialists and no fault can be found with these chapters. The subject of injuries to the ear commences at the end of this Part, and will be concluded in Part 5, which completes the work. S. H. W.

Malignant Disease and its Treatment by Radium. By STANFORD CADE, F.R.C.S. Published by Messrs. John Wright & Sons Ltd. *Price* 75*s.*

MR. STANFORD CADE'S unique experience in the treatment of malignant disease, both as a surgeon and as a radiotherapist, qualifies him beyond doubt as a proper author of a work of this type. That he has achieved great success is open for all to see. The book deals, in good perspective, with every aspect of malignant disease. The first section is concerned with the physics and technique of radiotherapy and with radium dosimetry. These topics, which possess many terrors for the average man, are explained in a most lucid manner. In the second section the biological effects of radium are discussed, and here is included a most valuable chapter on the protection both of patient and radiotherapist from the dangers inherent in the use of radium. The third section, comprising four-fifths of the book, deals with the clinical aspects of malignant disease in every part of the body.

To the surgeon this third section is the main attraction. In each organ or tissue a complete account of all varieties of malignant disease is given. A thoroughly sound pathological introduction is followed by an excellent clinical description and an account of the natural history of the disease in that situation. The relative values of surgery and radiation are discussed with reference to treatment, and where radiation is recommended the indications for the use of radium, teletherapy and X-radiation are clearly expressed, full details of treatment being given. Mr. Cade makes a special plea for co-operation between surgeon and radiotherapist. This co-operation, unfortunately too often lacking, cannot help but lead to improved results, for it is becoming more and more evident that in the majority of cases of malignant disease a combination of radiation and surgery is often desirable.

The whole book is magnificently produced. The many illustrations and plates are excellent, and there can be no doubt that Mr. Cade has produced a work which will remain a classic reference book for many years to come. Both surgeon and radiotherapist will find in it all the information they desire, and there could not possibly be a greater stimulus for closer collaboration between these workers for the attainment of better results in the treatment of malignant disease.

S. H. W.

Modern Drugs in General Practice. By Ethel Browning, M.D., Ch.B. Published by Messrs. Arnold & Co.: London. Pp. 236. *Price* 10*s*.6*d*.

THIS book will prove invaluable to those students about to take their final examinations, and to all engaged in general practice. There is a tendency in general medical teaching for great stress to be laid on the careful taking of the history, the physical examination, and the consideration of the differential diagnosis, whereas the important question of treatment is often glossed over so that many a student qualifies with but little knowledge of the effects, good or ill, of a certain remedy he would advise. Doubtless this is partly due to the view that efficient treatment is in most cases dependent on a correct diagnosis. As a means of filling this gap the general textbook of medicine usually falls short in that instructions for treatment, though concise, are in the main conservative by reason of the prevailing custom that no new treatment should be included that has not stood the test of careful clinical observation, or had full experimental proof.

The general practitioner was scarcely better off as he perused the countless circulars relating to modern drugs. Since the war this regular stimulus to try out a new drug has been abruptly cut off so that he is now dependent on the current medical journals.

So it is that this new book supplies a real need and the author has given a clear picture of the indications for and the correct administration of many new and powerful drugs. She has been at pains to indicate that their very potency is fraught with disadvantages and perhaps dangers, and that without this knowledge indiscriminate prescription will bring many a good drug into disrepute.

The first chapter deals with the Sulphonamide group of drugs and the view is held that these drugs are bacteriostatic in their mode of action rather than bactericidal. Many local and general infections are now recognised to respond favourably to these drugs, and a list of diseases so influenced is given with information as to the appropriate drug and dosage. Early administration with high initial dosage and the addition of sodium bicarbonate to combat acidosis is advised. Both mild and severe toxic effects are described in detail, and it is suggested that early recognition and avoidance of these undesired side-effects will be the concern of the physician and also of the chemist in his search for new compounds.

Gold therapy is then discussed, though it must be uncommon for general practitioners to meet cases suitable for this treatment. The two types of case that respond—active rheumatoid arthritis and occasional cases of pulmonary tuberculosis—are better treated in an institution where physiotherapeutic measures and constant observation are easily available. It is, however, not generally recognised that by the use of gold salts the prognosis of such a disabling disease as true rheumatoid arthritis has been greatly improved.

Under the heading of cardiac drugs the use of digitalis is considered at length. Though not a new drug, in recent years the old tincture has given way to the new pill or granule. The latter are carefully standardised, retain their potency, and are convenient for dosage and for travel. The equivalent dosage in terms of minims of tincture is given, though there are many who would not agree with the maintenance dose suggested. The modern view that digitalis is effective in cases of congestive cardiac failure with or without abnormal rhythm is expounded.

A very useful chapter is that dealing with drugs acting on the autonomic nervous system, with arrangement into two groups, " adrenergic " and " cholinergic."

Other sections deal with sedative and hypnotic drugs, urinary antiseptics, gastro-intestinal remedies, and in particular the new mercurial diuretics which are advocated in both right- and left-sided heart failure provided there is no serious renal disease.

The last chapter considers the use of external applications and local anæsthetics, both subjects of topical interest at the present time.

Not the least of this book's attractions is the excellent bibliography. It will be welcomed by all interested in modern therapeutic development, and it is hoped that should present views change or more powerful drugs be found, they will be included in a revised edition of a similar high sandard.

C. S. D.

Arthritis and Allied Conditions. By Bernard I. Comroe. Published by Messrs. Henry Kimpton Ltd., London. *Price* 40*s*.

IT is difficult for the student or practitioner to get a firm grasp on the subject of Arthritis, as its full extent requires some knowledge of Medicine, Surgery, Orthopædics, Radiology and Physiotherapy. Agreement upon the classification of the different forms of arthritis has not yet reached many of the textbooks, and often there is a poor account of the pathology, which is made more difficult to understand by the infrequency with which normal and abnormal joints are opened post-mortem. The treatment of patients seen at hospital or in practice tends to be handed over to a physiotherapist, and there are few students who have the time or inclination to study what is done for them.

The presentation of "Arthritis and Allied Conditions" in a single volume is to be welcomed. The book begins with a few notes on the examination and investigation of cases, followed by 278 pages on rheumatoid arthritis. These are followed by similarly arranged though shorter chapters on osteo-arthritis, fibrositis, spondylitis, gout, painful feet, backache, etc. Consideration of the chapters on rheumatoid arthritis gives an idea of the book as a whole. Ætiology, pathology, symptoms and general treatment are each separate chapters. The next twenty chapters are concerned with special forms of treatment, such as the treatment and importance of foci of infection, physical therapy, vaccines, orthopædics, gold, etc. The pathology would be more intelligible if there were some illustrations. In each chapter all the knowledge up to the present day is included, but it is obscured by a good deal of irrelevant matter. For instance, the chapter on the role of vitamins includes a short dissertation on A to E, K, M, P andT, then states that there is no evidence for E to T inclusive playing any part in arthritis, and there are 130 references in the bibliography. If the information about each vitamin was fuller the chapter might be useful as a work of reference on vitamins, but it is difficult to see how such a paragraph as follows can be of value to anybody: "It has not been proven that vitamin E is required for normal health or reproduction in man. Recent reports have indicated a possible therapeutic role of vitamin E in threatened and spontaneous abortion." The author refers to practically everything that anybody has ever said about arthritis, giving 1143 references to papers on rheumatoid arthritis alone, and for the most part leaves the reader to sort the good from the bad himself. He mentions that manipulations and operative procedures may be used to correct deformities, but that the prevention of deformities by adequate splinting is far better treatment—a statement with which none could quarrel. Almost in the same breath he says a small elevator can be built into the home for an arthritic patient who is unable to use the stairs. This may be so in America, but here we should usually prefer to suggest living on the ground floor.

It is certainly impossible to be dogmatic about arthritis, but to be of practical value to the physician, the subject mater of this book should be very much abbreviated. It has, however, a place as a work of reference for those particularly interested in the subject.

E. B. F.

Inter-relation of Abdominal Diseases. By ELEMER FORRAI, M.D.Budapest, L.R.C.P.Edin. Published by Messrs. Heinemann, London. Pp.165. *Price*

THIS book might almost be described as an elaboration of the well-known aphorism that "the stomach is so sensitive an organ that it must needs weep when any of its neighbours are in trouble." Dr. Forrai gives a detailed account of 300 patients with gall-bladder disease with particulars of other abdominal complaints from which these same people suffered at various times. He then goes on to synthesise the picture of what he calls "gastro-appendiculo-hepatocholecystitis," pointing out that many cases may shew not only symptoms referable to, but actual anatomical changes in several of the organs indicated. He considers the tendency to this complex disorder to be hereditary, but the evidence seems somewhat scanty. There is a very absorbing chapter on allergy in the causation of which a dominant role is ascribed to the liver.

On the whole Dr. Forrai is more impressive when he is theorising than when he is discussing his own clinical material. In presenting his cases of gastro-appendiculo-hepatocholecystitis he makes a special point of emphasising to which viscus the patient's first symptoms were referable, but, since the list of symptoms which are said to incriminate a particular organ are so similar in the cases of the appendix, the gall-bladder and the liver, it is difficult for the reader to see how a definite distinction could be made. Moreover, the criteria upon which the basic diagnosis of cholecystitis was established are not clearly set out, for only 196 were X-rayed, and we are told that in some cases the diagnosis was confirmed by "other examinations and the course of the malady."

The idiom is, in places quite bizarre, but the references to the literature are full, relevant papers being excellently summarised; and the book gains additional interest as an indicator of contemporary trends in Continental medicine.

V. C.

Pharmacology and Therapeutics. Poulsson's Textbook. By S. ALSTEAD, M.D., M.R.C.P. Third Edition with Appendix. Published by Heinemann. Pp. 557. *Price* 2[illegible]*s.*

THIS book is essentially a textbook of therapeutics and *materia medica* containing just enough pharmacology to explain the use of the drugs. As a book on therapeutics it is very good. Every drug in the pharmacopia is mentioned, as well as many unofficial preparations and an account of the recent Addendum to the

B.P. is given in an appendix. This also contains an excellent description of the sulphonamide preparations and the method of administration and dosage in various conditions.

The text, on the whole, is well written and easy to read, although some parts still bear the scars of the translation from the Norwegian, in the form of un-English constructions and an excessive use of the definite article. The book is full of useful practical hints on the administration of drugs, drawn from the author's extensive experience. The *materia medica* portions are well produced, most of the common preparations being included, together with a critical account of the indications for their use.

The wealth of practical details makes the book a valuable guide for general practitioners, but, at the same time, makes it of less value to the medical student, who is concerned chiefly with the general principles of therapeutics. For him it would be a suitable reference book. The index could be better.

M. L.

Pharmacology. By J. H. GADDUM, D.Sc. Published by Oxford University Press, London: Humphrey Milford, 1940. Pp. 407 + xv. *Price* 17*s*. 6*d*.

BOOKS on Pharmacology tend to fall into three classes: those that are bad because they are too long and involved, those that are bad because they are too short and sketchy, and those that are just bad. Professor Gaddum's book, fortunately, is like none of these. It is in a class of its own—the highest class—a position it gains by its many novel features. It is written lucidly, with occasional touches of humour, thus making the reader's task an easy one, and it contains all the information a student requires to pass his Second M.B. without giving so many facts as to confuse him.

Professor Gaddum is an experimental pharmacologist, and the book has been written from an experimental point of view. He describes first experimental methods of investigating the action of drugs on different tissues and in different animals, and then their action in man. In this way he shows why certain drugs are used therapeutically and what criteria must be satisfied before a drug can be used on man. The author hopes that if doctors have an adequate knowledge of these criteria, they will be less ready to try out, indiscriminately, new remedies put up by drug manufacturers. Great stress is laid on methods of standardisation and assay of drugs, part of a chapter being devoted to the statistical principles involved in biological assay. This feature will be welcomed by the student as it is part of the syllabus and as far as the reviewer is aware is to be found in no other textbook. As this book is intended mainly for students in their preclinical stage, a brief account only is given of the therapeutic uses of the drugs. The book is quite up to date, is well illustrated, and has a very good index. The reviewer feels sure that Professor Gaddum's book will become the standard textbook on Pharmacology for all medical students.

M. L.

Actinotherapy and Diathermy for the Student. By E. B. CLAYTON, M.B., C.h. Published by Messrs. Balliere, Tindall & Cox. 1940. *Price* 8*s*. 6*d*.

A SECOND Edition of this book has soon followed the first, and though primarily intended for students of electrology there is plenty of information contained in it which is useful to medical students and practitioners.

The chapters on physics are rather brief, but the apparatus used in light treatment and diathermy is very well described and the instructions for their use are easy to follow.

Some new and some improved diagrams are contained in the new edition, but there are still some which might be improved.

The section on short wave diathermy has been enlarged and this is welcomed in view of the increased use of this form of treatment, at least where government instructions have permitted the retention of this type of apparatus. The chapters on physiological and physical effects of short wave currents and on special precautions to be taken when they are used have been newly added and are of great value.

W. G. T.

Diseases of the Nervous System. 2nd Edition. Pp. 950. By W. RUSSELL BRAIN. Published by Humphrey Milford, Oxford University Press. 1940. *Price* 30*s*.

THIS book is deservedly one of the most popular English textbooks of neurology; it is of great value for post-graduate study, but also, owing to the lucidity of the text, it is well within the range of the average medical student. Great stress is laid upon the importance of a good knowledge of anatomy and physiology in the study of neurology and the first section of the book is devoted entirely to the neurological aspects of these subjects. In this second edition, the text has been thoroughly revised and brought up to date; the sections dealing with endocrine and trophic disturbances have been omitted and much new material introduced; a new chapter upon the psychological manifestations of organic nervous disease precedes that dealing with the neuroses. The relationship of vitamin lack to various neurological disorders is considered and modern ideas on the etiology of other obscure neurological problems are discussed. Neurotrophic virus infections and the demyeliminating diseases are considered separately and recent work upon electroencephalography is described. Few of the important advances which have been made since the first edition appeared have excaped mention, but the bulk of the book has not been unduly increased. The illustrations and photographs are good and the pathology of each clinical condition is adequately dealt with.

N. A. N.

Anatomy and Physiology for Junior Nurses. By F. NORTON. Published by Faber and Faber. *Price 3s.*

THIS is a very simple text book of Anatomy and Physiology—only useful as a first approach to the subject—or for assistant nurses who only require to know the merest outline of the structure and functions of the human body. The subject matter is not sufficient for those girls in school who intend to take up nursing—for non-professional readers it might serve a useful purpose. The exposition is direct and clear, and the diagrams very simple and easily understood.

H. M. G.

Fevers and Fever Nursing By EVELYN PEARCE. Published by Faber and Faber. *Price 6s.*

THIS book, now in its fourth edition, is a very useful guide in nursing febrile diseases, apart from those usually isolated at special hospitals, and the introductory chapters on infection, immunity, chemotherapy and methods of isolation are excellent.

Nurses will appreciate the amount of nursing detail given, both on the subject of general observation and in connection with the individual diseases.

The book can be recommended with confidence to nurses working in fever hospitals, and also to nurses who do not wish to take the examination for admission to the Fever Nurses Register. It is essential that nurses on the General Register should know many aspects of the nursing of infectious diseases for the protection both of themselves and of their patients.

I. K. B.

Pye's Surgical Handicraft. Edited by H. BAILEY. Published by Messrs. John Wright. Twelfth Edition. Pp. 595. *Price 21s.* .

THIS is an appropriate time for the appearance of a new edition of such a popular book. The same policy of simplicity and conciseness has been followed with the practical difficulties which the newly qualified man is liable to meet with. Under present conditions a book of this description may very well prove invaluable.

Although concisely written no important detail has been omitted. In the chapter on Blood Transfusion for instance attention has been drawn to the importance of having the cannula or needle at the correct angulation to the wall of the vein.

Another example of the completeness of each chapter is to be found in the chapter on Preparation for Operation. This is commenced by reminding the person responsible to get written consent before any operation is performed. This may be a small point, but neglect of it might very well cause a great deal of trouble.

Considering the high standard of production, the print and illustrations leave little to be desired, the price is reasonable and is at once a tribute to the skill of the publishers and a reflection of the anticipated demand for the book. This new edition should prove an instant successor to its predecessors.

A. G. R.

Handbook of Anaesthetics. By ROSS and FAIRLIE. Revised by MINNIT. Fifth Edition. Pp. 364. Published by E. S. Livingstone. 1940. *Price 12s. 6d.*

THIS book is one of the best known and most valuable of the textbooks on anaesthetics available to the student. It contains all the necessary information without any frills, the material is well arranged and is accurate. The book has now been revised and brouhgt up to date, but it has by no means been rewritten; most of the original framework and much of the phraseology remain as before. New chapters which have been introduced deal with the subjects of Cyclopropane and closed-circuit anæsthesia, with Vinesthene and with the therapeutic uses of Oxygen, Helium and Carbon-di-oxide; in other chapters, well-established new methods and new apparatus receive adequate consideration. The book remains an admirable elementary introduction to the subject of anæsthetics and may be highly recommended for the student.

N. A. N.

An Introduction to Biochemistry. By W. R. FEARON. Wm. Heinemann, Ltd., 1940. 2nd Edition. *Price* 17*s*. 6*d*.

THIS is a good standard textbook of biochemistry, in which the subject is first approached from the standpoint of inorganic biochemistry. In other words, the first part of the book is devoted to an account of the elements, both common and rare, which are of importance in the phenomenon of life. The inorganic compounds are also considered and the principles of physical chemistry explained. A certain knowledge of the fundamentals of organic chemistry is assumed so that much needless matter may be eliminated, and the second part of the book proceeds to describe the biochemical organic compounds, from the simple to the complex, and the part they play in metabolism. In the second edition, the greater part of the text has been entirely rewritten and many fresh chapters introduced, dealing with such subjects as colloids, biological pigments and tissue respiration. Many instructions for practical work to illustrate the text are included; among the most interesting of these are the citrulline reaction for proteins, the diffusion test for acetone and micro methods for blood analysis. The text is well arranged and easy to understand; it gives an admirable insight into the trend of modern biochemistry. The amount of material presented exceeds that actually required by the medical student, but for those whose interest extends beyond examinations, it can be highly recommended.

N. A. N.

Hospital Information, etc.

Notices

AT a meeting of the Blues Committee held on April 12th, the following Blues and Half-Blues were awarded :—

Boxing.—Blue, A. G. Albers; *Half Blue*, T. L. T. Lewis.

Cross-Country Running.—Blue, W. A. Porter; *Half Blue*, B. F. Sartory, P. A. Dodington.

Rugby Football.—Blue, R. M. Sharpe, R. F. Camp, P. C. Gartrell, T. L. T. Lewis, D. M. Strathie.

Squash.—Blue, G. Hildick-Smith, F. R. C. Manning, J. W. Lewis, A. A. Shein, J. Mordaunt.

Swimming.—Blue, F. H. Jowett, J. A. Powell.

R. N. F. KYNASTON,
Hon. Sec. Blues Committee.

THE SOCIETY OF APOTHECARIES OF LONDON

The Society of Apothecaries of London Examination for May are as follows :—

Surgery.—May 12th, 14th, 15th.

Medicine, Pathology and Forensic Medicine.—May 19th, 21st,22nd.

Midwifery.—May 20th, 21st, 22nd, 23rd.

Pass List

SOCIETY OF APOTHECARIES OF LONDON FINAL EXAMINATION

February, 1941

Surgery

D. W. Mayman *R. South

Medicine

C. N. D. E. Eastes *R. South

Forensic Medicine

C. N. D. E. Eastes *R. South

Midwifery

*R. South

March, 1941

Surgery

*E. W. Crews *S. Wetherell

* Have now completed the Examination.

Changes of Address

A. E. Ram, Lieut. I.M.S., c/o Grindley & Co., Parliament Street, S.W.1.

Miss Phyllis E. Tollit, appointed Matron Lady Hardinge Hospital, Delhi, Xmas, 1940.

F. J. R. Stoneham, Flying-Officer R.A.F. (V.R.), Benson, Oxfordshire.

Deaths in the Services

MORLEY.—On March 13th, 1941, at Bournemouth, Surgeon-Captain Edward John Morley, R.N. (ret.).

Deaths

BLAKER.—On March 31st, 1941, the result of an accident, Thos. Fdk. I. Blaker, of Priestfields, Rochester, aged 91 years.

HOUGHTON.—On April 18h, 1941, Norris Norman Allen Houghton, M.D., M.B., of Grand Avenue, Worthing.

EDS. {N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV 3rd *May* 1941 *Number* 1377

PASSIM

ONCE again the front quadrangle of our hospital has been ablaze with light in the small hours of the morning, and the colonnade pungent with acrid fumes. On this occasion unfortunately, one of the wings of the hospital itself was alight. Despite the activity of the fire squad, who had already disposed of many incendiary bombs upon the roof of the Nurses' Home, one bomb gained a hold upon the roof of the Counting House. Before sufficient jets of water could be brought to bear, the structure of this historic old building was fairly alight. In addition to the Counting House, the Court Room, with its famous old oak panelling, the Superintendent's Home, and the Gazette Office, were gutted. Thanks, however, to a continuous stream of helpers, students, staff, male and female, and even some of our Borough friends, who laboured incessantly to remove every article of value from this wing, remarkably little was destroyed. The records of the hospital, the oil paintings from the stairway, and much furniture, were safely removed and stored in the quad, until places could be found for them all. The Superintendent has already recorded his deep appreciation of the work performed by all concerned. The editors of the *Gazette* would like to take this opportunity of expressing their sincere gratitude to all who so ably cleared the *Gazette* offices; but for their labours, the last issue of the *Gazette* could not have been distributed until many days after its publication; and all of our records and manuscripts were salvaged, even to the last postage stamp. Now the bare blackened walls alone remain to remind us of the stupid savagery of total warfare; but we are thankful to be able to reassure our readers that neither was the running of the hospital in any way impaired, nor were any of the wards damaged in this latest attack. On this particular night, the unpleasantness seems to have been fairly evenly distributed throughout our Sector hospitals; but again, except in one instance, the actual damage done was slight.

The arrangements and organisation for the treatment of the victims of any possible poison gas attack are being kept well under review; the weekly wearing of our gas masks on a certain day for a certain time has now become part of the routine of the hospital. Last week, in order to test out further the state of preparedness, it was arranged to liberate an innocuous, if annoying, vapour in the Park, and to decontaminate such volunteers as exposed themselves to it. Unfortunately a high wind arose, sufficient to vitiate the whole experiment, which was therefore postponed for a fortnight.

The benefit accruing from the assistance that has been so generously given to certain English hospitals by American organisations, will be further enhanced by the decision to allow a thousand volunteer doctors from the United States to practice in this country, in the E.M.S. and in the Forces, whenever the shortage is acute. The shortage of medical man-power in this country is very largely artificial; it results from the necessity under the conditions of modern warfare to hold large numbers of doctors more or less in reserve, both in the E.M.S. and in the Forces, in order that all contingencies, which may arise very suddenly, can always be anticipated. In fact, in all branches of the profession, including general practice in the evacuation areas, the shortage is now being felt acutely. Not only will the American doctors help to fill such gaps, but also, the interchange of ideas upon medicine in general and treatment in particular, which must result, will be very stimulating to the advancement of medical knowledge in this country. At the same time, it is doubtful whether the medical services of this country have as yet been fully plumbed to their depths, or distributed as well as they might be. Moreover, there are still a large number of alien doctors, whose integrity in each individual case must by now have been fully explored and who could be usefully employed in this country for the duration of the war. The employment of students in their final year as house officers in hospitals seems to be undesirable today, under conditions where a sudden spate of activity may throw very heavy responsibilities upon their shoulders; in fact, the more experienced the houseman, the easier it is for the registrar or surgical officer to devote his whole attention to a long list of cases, without the worries of ward work also on his shoulders. There seems to be no clear exposition as to whether this policy is to be carried out or not, but in view of the fact that at certain hospitals students are already employed in this capacity, it seems desirable that some authorative statement should be issued.

▭

NEWS has just been received that Dr. F. A. Knott has been elected to the Fellowship of the Royal College of Physicians. May we extend to him our warmest congratulations for the honour that has been bestowed upon him and that he has brought to Guy's Hospital.

Pancreatic Cysts

A Clinical Lecture delivered at Guy's Hospital by E. G. Slesinger, O.B.E., M.S.

GENTLEMEN,—I have chosen pancreatic cysts as the subject for my lecture to-day partly because I operated on an unusual example this month, which I will mention to you and partly because being of comparatively rare occurrence they are perhaps more properly dealt with in a lecture than in bedside discussion.

The first point that needs to be realised is that when we speak of pancreatic cysts we mean any fluid tumour in or in association with the pancreas. Actual cysts of the pancreas itself are relatively few in number, and the conditions which are embraced by the term pancreatic cyst are diverse in causation, differ in position, and present a varied clinical picture. So much is this the case, that in considering differential diagnosis, it is often a question whether any particular condition which simulates a pancreatic cyst might not in fact be grouped under that name.

The usual classification which is adopted is as follows :—

1. Retention cysts.
2. Cysts of proliferation $\begin{cases}\text{cystic adenoma.}\\ \text{cystic carcinoma.}\end{cases}$
3. Congenital cystic disease.
4. Hydatid cyst.
5. Dermoid cysts.
6. Blood cysts.
7. Pseudocysts.

Cysts of the last group, which is by far the most numerous, are of course not, strictly speaking, pancreatic cysts at all, but are situated in juxtaposition to the pancreas, and often arise directly or indirectly from it, although this is not necessarily the case.

Retention cysts are caused either by the impaction of a stone, by cicatricial stenosis, or by pressure on the duct from without. They occur in two types. In the first, while the whole duct is dilated, the cysts occur in one or more of the radicles of the main duct. These are seldom very large and are mostly found post-mortem; where, however, they were bigger and led to operative intervention, cases have been reported in which the nature of the cyst was recognised by the presence of duct openings in the cyst wall.. In the second type of retention cyst, the whole duct is dilated, and it is to this type that Virchow gave the name ranula pancreatica, from the resemblance which the glairy mucoid contents have to those of a ranula in the floor of the mouth.

The cysts of proliferation are either innocent or malignant, and it is often difficult to distinguish pathologically between the two; but it seems probable that when they occur they are mostly cystic carcinomata. As far as I am aware, cysts do not occur in connection with the adenomata of Island tissue which sometimes occur in the pancreas and give rise to hypoglycæmic crises.

Congenital cystic disease occasionally occurs in the pancreas, usually in association with a similar condition in the kidneys and liver, but occasionally the pancreas is the only organ affected, in which case there may be only one or two cysts present, or even only a single solitary cyst. In this latter class the cyst, which may attain considerable size, is usually noted during the first year of life.

Hydatid disease occurs but seldom in the pancreas, but occasional examples have been recorded in regions where hydatid infection is common.

Dermoid cysts also are rare. Judd recorded a case occurring in the tail of the pancreas and containing hair and a tooth.

Bloodcysts sometimes follow acute or chronic pancreatitis. But although it is known that hæmatoma of the pancreas does occur during the course of inflammations of that organ, there is no real evidence as to whether the cysts containing blood which are sometimes found are the sequel to such hæmorrhages, or whether they represent bleeding into pre-existing cysts of some other type.

By pseudocysts is meant those cysts found in close proximity to the pancreas, but not originating in the substance of the gland. It is sometimes merely a matter of whether or not histological examination has been complete which decides whether certain cystic tumours are grouped as pseudocysts of the pancreas, or are correctly attributed to the organ or tissue from which they arise. Pseudocysts of the pancreas may be traumatic or non-traumatic. In the former the contents are usually blood-stained and in the latter clear. Some non-traumatic pseudocysts are thought to result from localised inflammations of the pancreas resulting in surface necrosis and leading to subsequent effusion. The commonest type of pseudocyst which is found is in reality an effusion into the lesser peritoneal sac, and was first described by Jordan Lloyd in 1892. He rightly pointed out that the mere fact that pancreatic juice may be found in these cysts is no evidence that the cyst is within the pancreas, as the juice may well have escaped following surface injury. Further, when such a cavity is entered either through the great omentum or through the transverse mesocolon, while the pancreas will be felt lying at the back of the cyst, the characteristic feature of such a cavity is that its largest part lies to the left, and cannot be reached by the finger from the front.

Such pseudocysts follow on trauma of the upper abdomen, and although the tumour has occasionally only been noted some years after the injury, in the bulk of the cases it has occurred in a few days, weeks or at most months after the accident.

Pancreatic cysts of all kinds are rather more often found in men than women, and although they occur at all ages most are found during young adult life.

Any part of the gland may be affected, but the tail is the commonest part implicated.

Cysts may be unilocular or multilocular, and the contents may be clear, milky or bloodstained, the latter being the most usual. Pancreatic ferments may or may not be present in the contents.

SYMPTOMS.

The symptoms produced by a pancreatic cyst are mainly those resulting from pressure on neighbouring organs, and their severity will vary according to the size of the cyst. In the early stages, when this is small, symptoms may be absent, or if present they are limited to vague discomfort in the epigastrium, unrelated to food. Gradually actual pain begins to be felt. This often tends to come on towards the end of a meal, and is felt in the epigastric region, sometimes radiating through to the back. Vomiting is not infrequent, and in the larger cysts it may be frequent and distressing. A curious feature present in many cases is the occurrence of pain and vomiting, sometimes accompanied by a mild pyrexia, in attacks recurring every few months and lasting for a matter of days, with free intervals between. It is possible that these paroxysms represent attacks of mild infection in the cyst, but if so, it is difficult to see what causes them to end. They are, however, of sufficiently frequent occurrence as to be almost a characteristic of pancreatic cysts. Jaundice is occasionally present, and results from pressure of the cyst on the common bile duct. Constipation is more frequent than diarrhœa, but either may occurr.

In nearly all cases there is rapid and continued wasting, and at times the patient may become very ill.

Sugar is sometimes found in the urine, and undigested fat and muscle in the fæces, depending on whether the cyst, either by situation or size, interferes with the function of the pancreas.

The chief sign, of course, is the presence of a rounded cystic swelling in the abdomen. In all true cysts, and in certain pseudocysts, such as the one I shall mention to you, the swelling is behind the layer of peritoneum forming the posterior wall of the lesser sac, whereas in the traumatic pseudocyst it is in front of it. At first the cyst is behind the stomach, but as it enlarges it may pass in one of three different directions. In most cases the cyst enlarges forwards, the stomach being displaced upwards and the transverse colon downwards, the extent of the displacement varying with the size of the cyst. In percussing the abdomen in such a case there is dullness over the cyst, with resonance both above and below. In large cysts, however, the stomach may be pushed upwards to such an extent that the upper zone resonance cannot be demonstrated.

The second method of enlargement is above the stomach. If this occurs the stomach is pushed downwards and to the left and the liver upwards, the anterior covering of the cyst being formed by the stretched gastrohepatic omentum.

Thirdly, in cysts arising from the tail or lower part of the body the enlargement may be between the layers of the transverse mesocolon. In such cases the transverse colon may be found stretched across the front of the cyst, or the cyst may bulge downwards and the transverse colon be found above it, with the omentum either pushed aside or covering the tumour. This downward growing type of cyst has several times been mistaken for an ovarian tumour when it has attained a really large size, and even the great Billroth reports having made this mistaken diagnosis.

If we sum up the signs and symptoms of pancreatic cyst therefore, we get the following points :—

Either a history of increasing abdominal discomfort and probably paroxysmal attacks, at intervals, of acute abdominal pains and vomiting, with wasting and the appearance of a swelling in the upper part of the abdomen, or alternatively a history of abdominal trauma such as a kick or blow in the abdomen followed days, weeks, or a few months later by the appearance of an upper abdominal swelling, with similar attacks of pain. The swelling will be smooth, fluctuant or tense and dull on percussion, and will be fixed and uninfluenced by respiration. If an X-ray examination is made, it will show the displacement of stomach and colon in the manner I have described, and if the swelling is in the head of the pancreas a characteristic enlargement of the duodenal curve can be demonstrated.

In regard to differential diagnosis, as I mentioned before it may be only by histological examination that the true nature of cysts in this region can be determined.

I have already mentioned the possibility of mistaking a pancreatic cyst of large size for an ovarian cyst. This mistake has usually arisen because the possibility of the tumour being anything else but ovarian was not thought of. Otherwise it is usually possible to feel the ovaries on examination, particularly if the patient is in the Trendelenburg position. Hydatid cyst of the liver is sometimes very similar in appearance to a pancreatic cyst. The presence of resonance above the cyst, which is increased if the stomach is inflated, will distinguish pancreatic cysts in the usual position, but if the cyst has come forward above the stomach it cannot be differentiated by physical examination. Cysts of the suprarenal cannot be distinguished except by histological examination. They are rarer than pancreatic cysts, although it is possible that some cases of so-called pancreatic cysts not sectioned are in reality adrenal cysts. Large hydronephroses and hugely distended gall bladders have both been occasional sources of mistake, but in either case physical examination or X-ray investigation should show the real nature of the swelling. Mesenteric cysts can be distinguished by their mobility, and abdominal aneurysm should not be a cause of difficulty. Certain retroperitoneal cysts arising from embryonic remains can often be quite indistinguishable from cysts of the pancreas, and indeed fall into the group of pseudocysts which we agreed should be included in our classification. The patient I recently operated on came into this category.

This was a young man of 26, whose history was that he had been passed as fit into the Army some eighteen months ago. About a year ago he began to have attacks of abdominal pain, occurring in paroxysms, and he was admitted to a hospital, where a tumour in the episgastrium was found. He was operated on, but the true nature of the swelling was not recognised, although a pancreatic cyst was considered as a possibility. A cavity containing milky fluid was drained, and after a few weeks the wound healed. Considerable thickening still remained in the epigastrium, and the attacks of pain began to recur at intervals, accompanied by weight-loss and slight pyrexia. When I saw him six weeks ago there was present in the epigastrium both to sight and to touch a rounded swelling, which was tense and immovable. It was dull to percussion, with resonant areas above and below, and presented the typical appearance of a pancreatic cyst. Urine and blood sugar were normal. The abdomen was explored through a paramedian incision, and after adhesions resulting from the old operation had been freed, a large cystic tumour, about the size of a large melon, was approached through the gastro-colic omentum. It was seen to be covered by the posterior peritoneum, which was thickened, and which was incised. The tumour was then seen to be a multilocular cyst, and the original idea of marsupialisation had to be abandoned. By gradual stripping, and by puncturing one or two of the larger cysts, the tumour was shelled out, its posterior boundary being the pancreas. On section this tumour was found to be a retroperitoneal mid-line teratoma. It therefore falls into the group of pseudocysts, of the non-traumatic and retroperitoneal class.

The treatment of these cysts can be considered under the three heads of aspiration, marsupialisation and removal. Aspiration is a useless and dangerous procedure and should never be employed. It is useless because the cyst rapidly refills, and dangerous because of the risks of hæmorrhage, or of the leakage or even rupture of the cyst at the point of puncture as it refills.

The majority of cases are best treated by marsupialisation, if possible; that is to say, by incision and drainage, followed by stitching the opening in the cyst to the abdominal wall.

This operation in itself is often one of considerable difficulty. If the cyst is very tense, it may be necessary to empty it first by aspiration before it is possible to bring its walls up to the abdominal wall. Again, if it is a small cyst, or if it is deeply imbedded in adhesions, it may not be at all possible to bring it up to the anterior abdominal wall. Such cases can be drained through the most convenient point posteriorly, such point being found by the hand examining through the anterior incision. In multilocular tumours again, marsupialisation may be impossible, though sometimes the cysts can be made to open into each other by breaking down their walls. The fluid that discharges from the resulting sinus is irritating to the skin, which is best protected by the use of aluminium paste. Discharge may continue for months or years, and is often copious. One patient in whom I marsupialised a cyst drained for over ten years, and during the time when the secretion was copious wore a tight-fitting tube opening into a bottle fixed in position beneath her clothes.

Extirpation of the cyst if possible is naturally the ideal procedure, but is seldom practicable, except in certain pedunculated cysts of the tail, or in the type of pseudocyst I described to you. In the type of pseudocyst which is in reality a distension of the lesser sac, marsupialisation is of course unnecessary, and healing will follow simple drainage.

I do not wish you to think from my remarks that pancreatic cysts are anything but very considerable rarities in abdominal surgery, but I think if you keep the features we have discussed to-day in mind you may have the satisfaction of making a correct diagnosis if in fact you happen to come across one.

Notes on the Growing Jaws

From the Presidential Address to the Guy's Hospital Dental Society, December, 1940, by
R. B. Rix, Esq., M.R.C.S.Eng., L.R.C.P.Lond., L.D.S.Eng.

If we magnify a new-born infant's head to twice its natural size in all directions it makes an interesting comparison with the adult head. The height, from vertex to chin, is now roughly the same in both but the proportions are different. The infant's face is too small and the brain case too large. The distance between the nasion and chin in the infant must more than double itself to reach adult proportions. The width of the face must increase to a less degree, and the profile will have to become more prognathous by an actual and relative increase in depth from the ear forward. It is estimated that, in bulk, the face equals about one-eighth of the whole skull in the new born, whereas it is about one half of the adult skull. The change in these proportions is brought about principally by the development of structures which serve the purpose of mastication.

Experiments in the feeding of madder to growing pigs have demonstrated some of the processes of growth of the jaws. Madder was employed as early as the 16th century for studying bone growth. John Hunter used it for his observations upon the growth of jaws in 1772. It was not until comparatively recently that the importance of his findings were appreciated. Since the Great War, Brash has confirmed and amplified them. He demonstrated in young pigs sites of newly deposited bone, sites of bone absorption, and so-called indifferent sites where there was no bone activity. It made an extremely complicated picture, but simple and valuable generalisations were obtained.

It was established that there was no interstitial growth. Growth came about principally by surface apposition. With external addition taking place under the periosteum there was absorption of the bone internally. The process is well illustrated in the zygomatic arch. The arch moves outwards by lateral addition and medial absorption, thus entirely replacing itself several times. In the maxilla the air sinuses complicate matters but the modelling follows the same plan, external addition and internal absorption under the muco-periosteum.

In addition to surface modelling, madder feeding revealed growth at the sutures, but their role in general enlargement did not appear so great. It is not easy to grasp or remember the complexities of their contribution to total growth, and later only the more important ones will be mentioned.

Let us first examine the growing maxilla. At birth the sacs of the developing deciduous cheek tooth lie immediately beneath the floor of the orbit in a gutter of alveolar bone. The incisors lie under the floor of the nose, and the canines at the base of the frontal process. The antrum does not separate the cheek tooth from the orbit.

It is not yet a cavity, but is merely a small furrow on the lateral wall of the nasal cavity. The furrow slowly deepens. Bone absorption takes place locally beneath the muco-periosteum, which is itself thus invaginated until it forms a pyramidial cavity in the body of the maxilla, communicating with the nasal cavity by a small osteum in the middle meatus. The base of the pyramid is formed by the lateral wall of the nasal cavity and the apex by the malar process. With this internal absorption there is an accompanying surface addition to the body. The enlarging antrum spreads the body of the maxilla downwards, backwards and outwards.

The downward spread has the effect of separating the cheek teeth from the orbit, and later the space occupied by the developing permanent teeth is replaced by the antrum as they erupt. The downward growth contributes to the increase in height of the palate and to the lengthening of the face. The backward spread is translated with the aid of suture growth, into a forward movement of the maxilla since the posterior wall cannot literally move backwards. A table of bone is created by the backward spread from which the three permanent molar teeth erupt in turn. The outward spread broadens the body and provides a foundation for a broad dental arch.

The malar process is gradually cut back by anterior absorption and posterior deposition. At first it is about opposite the second deciduous molar region. Later it is opposite the first or second permanent molar. The emergence of the upper jaw thus becomes more apparent.

In the palate the length antero-posteriorly increases by addition to the posterior border of the palatine bone. A little further forward there is growth at the transverse palato-maxillary suture. More forward, the pre-maxillo-maxillary suture adds a little to the length during the first few years of life. And finally there is surface addition to the anterior edge of the maxilla.

A coronal section of the palate is interesting. Bone is being deposited upon the under surface and being absorbed on the nasal surface. The whole palate gradually descends. The height of the palate, however, is not thereby decreased. The antra plus the alveolar bone are descending more rapidly than the central segment of the palate, and its height is actually increased. Lateral dimensions are increased slightly by growth along the medium palatal suture.

The more important sutures around the maxillæ may be conveniently grouped according to the main directions of growth which they impart. The downward group consists of the malo-frontal the spheno-frontal, the fronto-maxillary and the malomaxillary sutures and those between the vomer and maxilla, and between the vomer and palatine bones. The outward group consists of the median palatal and malo-maxillary (vertical part), the spheno-malar and spheno-temporal sutures. In the forward group are the spheno-temporal, pterygo-palatine and palato-maxillary sutures. The spheno-temporal suture appears in both the forward and outward group because of its obliquity.

The alveolar bone develops along the lower border of the periphery of the body of the maxilla. Together with the teeth, which it supports, it makes a large contribution to the total height of the face. It is entirely dependent upon the presence of teeth. No teeth, no alveolus. Unfortunately one cannot conversely say that with thirty-two teeth present there will invariably be enough alveolus for their perfect alignment. If the body of the maxillæ is inadequate or if the apical base, as Lundstom called it, is small the teeth will not grow in alignment. The alveolus does not make up for deficiences of the maxillæ.

In the lower vertebrates the alveolus is a separate bone, but in humans it is fused to the jaw, and is indistinguishable from it. It grows, as you would expect, by surface addition and follows the three main directions of growth already mentioned. There is considerable local activity as each tooth erupts.

The mandible at birth is little more than a gutter containing the deciduous tooth sacs. The condyle is nearly at the same level as the horizontal ramus. The angle is wide, about 170°. The symphysis closes from below upwards during the first year of life. There is no growth between the two halves of the mandible as there is in the maxillæ.

The horizontal ramus becomes stouter between its external and internal surfaces. Most of the surface addition is external, but not all. One might think that there must be much absorption on the lingual side, for how else could the jaw broaden. The answer is to be found in the way the diverging rami grow at their posterior ends. The height of the jaw is increased by deposition of bone along the inferior border, but the total increase is due principally to alveolar growth along the superior surface. In the adult it accounts for more than half of the height.

The increase in length antero-posteriorly is brought about by the translation backwards of the ascending ramus. Bone is added to its posterior surface and absorbed along the anterior border up to the coronoid process. The backward translation is relative. Its effect is a forward movement of the horizontal ramus. One should mention here the site of bone deposition which produces the mental eminence. The height of the ascending ramus is increased by addition to its superior surface and to the surface of the condyle. Without adequate lengthening, the downward growth of the *upper* cheek teeth would cause the bite to be gagged on the back teeth. In developmental open bite one sees this error in correlated growth.

The angle between the ascending and horizontal rami decreases, not of course by bending, but by surface remodelling. When maturity is reached the angle is reduced to about 110° and the ascending ramus is situated almost vertically. There is an interesting parallel between the angle and the relationship of the upper and lower dental arches to each other. The squarer the angle the more likely is the relationship to be normal. Those of you who have a wide angle will have post-normal or pre-normal occlusion.

Vertical growth of the alveolus has been mentioned. As in the upper jaw, alveolar growth also proceeds in the forward and outward direction but to a less extent.

Although alveolar bone does not possess sufficient adaptive response to ensure good alignment of the teeth it does seem to be influenced by its immediate environment. It is to the special disposition of the alveolus that the occlusal curve is maintained. The lower curve is perfectly adapted to the upper. The two curves are akin to the articulating surfaces of a joint, but are made up of many dental segments, each beautifully contributing to the general contour. The alveolus carries each tooth to its correct height, and among the factors determining that height are the position of the opposing tooth or cusps and the range of movements of mastication. We all know how the loss of teeth will make the curve irregular in the opposite jaw. We have seen how an individual lower incisor will rise to the core of a jacket crown preparation, even in an adult, if there is a delay in fixing the crown. Similarly, I believe a group of lower incisors can rise if they are given the opportunity. When, for instance, they are situated too far behind the upper incisors, an excessive incisor overlap is established. The lowers rise until they reach contact with the upper cingulæ or palate. The alveolus deepens, and moves them up until they touch something. A case of this description presents an exaggerated occlusal curve, seemingly depressed posteriorly, but actually elevated anteriorly. It might be argued that this conception puts the cart before the horse, and that the post-normality of the lower incisors is the result of the excessive incisor overlap. A further example will show, I think, that the conception is at least sometimes correct. Suppose the lower temporary canine teeth, in a child of eight years, are extracted to make room for four crowded lower incisors. We will assume that the arch relationship is normal, and that, viewing the upper arch separately, there seems no need for the present to find more room for upper incisors by posterior extractions. The lower incisors will subsequently become more regular. They find room for themselves by drifting distally. All this may appear to the good, but one slowly comes to realise that their relation to the upper incisors is more lingual or post-normal. They do not maintain their forward position without an " intact " lower arch to keep them buttressed forward. And here is the interesting point ; as they fall lingually the alveolus elevates them so that they still maintain biting contact with the upper incisors. They occlude nearer to the necks of the upper incisors than they did before. In other words the incisor overlap has increased as they have become post-normal. It seems, therefore, that in the vertical direction alveolar adjustments take place which are not pre-destined, but which are adaptive in character.

One can recall another interesting example of adaptation. In developmental open bite the lower alveolus in the incisor region is deeper than normal. There is compensating growth, which nevertheless does not succeed in bringing about an incisor overlap.

There is evidence that in the lateral plane, the alveolus reacts to local conditions. Normally there is a negative pressure between the tongue and palate when the lips are closed. The tongue exercises an internal moulding effect, spreading the alveolus and dental arch, and producing a dome shaped palate.

When the vault of the palate is high and the upper arch narrow, Brash pointed out that the three main directions of alveolar growth are reduced to two. The directions are downward and forward, but not outward. With a given amount of vertical growth, the less it is deflected outwards, the lower will it be able to carry down the teeth, and the higher will the palate appear. The combination of high palate, vertical alveolus, narrow upper arch, long face and parted lips, goes to make up the picture sometimes called adenoid facies. It is a speculative designation, for with, or without, adenoids it is seen only when the tongue fails to remain habitually in its proper place. The dorsum should be closely applied to the palate and lingual surfaces of the upper teeth. The descent of the vault of the palate by bone deposition to the undersurface is encouraged by correct tongue position. The tongue can be likened to a sucker, hanging from the palate and carrying the weight of the lower jaw while at rest. The importance of closed lips can be readily understood when it is realised that without them negative pressure within the mouth is not achieved, and the beneficial effects of the tongue are lost. The work of Somerville Hastings and Warwich James bearing on this subject is as valuable and as interesting reading as a student of orthodontics could wish to find.

Sector News

Guy's Letter

IN the destruction of its Court Room, Counting House and Superintendent's House, the Hospital has suffered its greatest disappointment. The remorseless train of events harrowed the blow—the first smoulder, the lack of water, the licking tongues of flame, the roaring furnace, and finally, the smoking ashes; this was the cremation of the most beautiful and gracious part of Guy's. That most of the portraits and records were saved from the grave is some consolation. If any of value were lost, it will be wondered why they had not been removed to safer places.

When a Guy's man thinks of his hospital, he visualises not the Medical School, Nuffield House, the Laundry or the Matron's Dachshunds, but the Front Quad and the colonnade. The preservation on rebuilding of those features after the war will ensure the future of a Guy's Hospital. The replacement of them by a vulgar block of flats like Nuffield House, will make Guy's no more than a happy memory. So it is, that the circulation of ominous rumours gives cause for disquiet. It is said that there is reason to believe that some of those in high places welcome the ruin of one side of the Front Quad as removing an argument for keeping the rest. If that be true it is a traitorous idealism designed to break the hearts of thousands of past, present and future Guy's men, yes, and women, too. Let those, who after the war are entrusted with taking decisions about rebuilding, remember that they speak not for themselves but for countless others, not for the replacement of a mere hospital, but for the reincarnation of Guy's Hospital.

We must now come to our fortnightly observation on the rubbish in the Park. We have been offered a sop, for a lorry arrived during the past week and took away some pieces of iron. It has not returned since. The dissatisfaction with this eyesore is universal and we have heard several of the honorary staff express their horror in the last week. It will soon be time for those responsible to unseal their lips and tell us why we are to live in a back yard throughout the summer. We understand that no gardener will be appointed until after the war. This only makes greater our debt to Miss Addiscott for her unceasing work in caring for the rockeries and for the glorious display of daffodils which breathe beauty into ugliness.

Of late, several comments have been heard regarding the large quantities of bedding and other hospital material remaining unprotected in disused wards. It is hoped that this state of affairs is not as black as the commentators have made it out to be.

There are some changes among the residents. Mr. Swann has left to be called up for the Air Force. We bid him farewell and good wishes and we welcome Mr. Kenneth Martin and Mr. Stead who join us on May 1st.

Doctors develop a jargon in talking to their patients. They grind out the same old platitudinous reassurances and homilies which have not even the virtue or the beauty of Church of England prayers. The preliminary for putting a needle into a vein is usually, " Just a prick now," or maybe, " Just one more prick." But it was refreshing to hear the other day, Handsome Ally the African replace this catchphrase with, " Hey boet, a prick now, man."

R. T. H.

Farnborough Letter

FOR the first time for some months this locality has recently been implicated in a blitz. Happily, the hospital itself was quite unharmed, but many of the staff and students who are billeted around had an exciting experience coping with incendiary bombs. Several students had the misfortune to lose many of their belongings but nobody attached to the hospital was injured.

The following morning a large number of casualties were admitted after having spent the night in a neighbouring hospital, and the surgical firms were kept busy dealing with these. They were dealt with—and we believe very adequately—but we do not feel justified in applying to the general arrangements here the glowing terms in which the writers of " Passim " have been wont to describe the arrangements at Guy's.

We have, owing to the demands of the Wildernesse, said goodbye to Sister Bell, and we shall soon be losing Mr. Jackson for the same reason. Sister Bell is taking a short holiday and, thus refreshed, will proceed to Sevenoaks to take up her pioneering task, in which we wish her every prosperity. At the same time, we feel that a very wise choice has been made in the appointment of her successor at Farnborough, and we offer heartiest congratulations to Sister Perkins on having as it were " taken silk." We understand that, although there is no outward and visible sign of the transformation, Sister Marston has achieved the distinction of becoming deputy assistant matron, so to her also we offer congratulations.

V. C.

Orpington Letter

BEFORE the next Orpington Letter is published, Orpington will have sustained a loss, for Cox and Bucknall are to leave us, the latter after his being here for a year. Wherever they may go they will carry with them the best wishes of those of us who remain. A small celebration is being staged the day before their departure.

We must express our thanks to the R.A.F.'s at Biggin Hill, and the W.A.A.F.'s also, for the excellent concert they gave us three weeks ago; it was a superb effort which would rival many entertainments that have held a London stage.

With the renewed intensity of aerial activity the hospital has been increasingly busy, both due to local air raid casualties and patients transferred to us from other areas.

We understand that the nursing staff have been " requested " to fire-watch. Whereas we fully realise that fire-watching must be done, we really do feel that a day nurse who watches from 2-6 a.m., and then goes on duty at 7.30 a.m., will be in very poor condition to carry out her essential war work—nursing. And what does our nurse do when she sees a fire—scream prettily, or put it out? For if the latter, she runs great risk of minor or major damage to her hands; and a nurse without hands is as much use as Hamlet without Prince of Denmark—possibly less. Surely our nurses, understaffed as they undoubtedly are, should not have this extra task imposed upon them, for it will either impair their efficiency from sheer fatigue, or, if time off is given to compensate for the hours on fire-watch, lessen their time of actual nursing; anyone can fire-watch; only nurses can nurse. Surely there must be people enough in Orpington who are not engaged on such essential work as nursing, who could perform this task.

One thing that the war has done, which we shall always regret, is the splitting up of Guy's as a whole. The students have been sent to different parts of the country and they can never know what a place Guy's really was when it was a complete functional unit and with its entire staff. One student, on coming here as a G.U. dresser, was heard to say, " Who is Mr. Doherty—is he a Guy's man? "

Sic transit gloria mundi,

B. D. J.

Pembury Letter

OUR recent remarks concerning Sisters and and Children's Wards, has apparently evoked no response, but readers of the " Pembury Letter " will be interested to hear that the newly appointed Sister of Farnborough Children's Ward paid a few days' visit to Pembury for instruction, and since leaving us is said to have paid a similar visit to Great Ormond Street Hospital. At least the story grows more interesting, even if it is inexplicable.

We were interested to read in " Passim " of the increasing incidence of phthisis in children at Guy's, because the children sent down to Pembury in the convoys are invariably convalescent cases of bronchitis. Now either Guy's is performing miracles of treatment, or they are sending us their unwanted " junk." *Alma Mater* will be surprised to hear that we are *not* a convalescent home, and moreover we can keep up a good admission of cases without depending on Guy's at all. We feel that the whole attitude of Guy's towards the base hospitals is very odd, and for some reason they look on us as primitive places inhabited by savages. We must remark that our surgeons do not use flint implements, nor do our physicians merely consult the oracle. Undoubtedly we lack some of the more complicated instruments, but we aren't all that backward.

This week we record with regret that Lane Roberts is leaving us. " Tony " has been a general favourite here, and we are very sorry to lose him. One of H.M. Services is about to receive a great character. In the rest of the Residents' Flat the cash register shows " No Change."

N. M. J.

Correspondence

Re Pembury Letter

To the Editor of the GAZETTE

SIR,—I commend your action in allowing me a preview of the "Pembury Letter," thus giving me the opportunity of replying in the same issue. I believe all matter of a critical nature should be shown before publication to the authority or individual against whom the criticism is directed—in that way your readers may reach a fair judgment by having the cases for prosecution and defence laid out before them side by side. Subsequent correspondence between the principals or their supporters will also be more clearly grasped, if the chief *pros* and *cons* have appeared under the same cover originally.

Turn then to the second paragraph of the "Pembury Letter." The answer to the first sentence is that cases of tuberculosis are never evacuated from Guy's to a base hospital. It is the policy of the Ministry and of the Local Authorities not to use the base hospitals in the Sector scheme as alternative sites for disposal of such cases. Tuberculosis is dealt with, as before the war, by notifying the appropriate Tuberculosis Officer. That I have strictly adhered to this policy I can call to witness Sector headquarters, Miss Addiscott, and various house-officers who have tried to persuade me to evacuate cases of tuberculosis by pretending that we had not made the correct diagnosis. Apart from the dishonesty of such a course, I have some regard for the reputation of Guy's. I may add that it would often have been convenient to send tuberculous cases to a base hospital, but even if I had managed to square my own conscience I should never have squared that of a Sector headquarters.

If N. M. J. regards phthisis as interesting and cases of recent acute bronchitis as "junk," he has some justification for the opinion he expresses in the last part of the second sentence; but I would challenge his next words. We do not look upon Pembury as a convalescent home. We do not send those cases of bronchitis to Pembury to convalesce—here again I am sure Sector headquarters would never allow us to do so—but we do send them out of London, and therefore to Pembury, as soon as they are fit enough to be moved, to complete their treatment before going on to a convalescent home. In many cases Miss Addiscott actually makes arrangements before they leave Guy's for a convalescent home after the treatment at Pembury has been completed, and will be prepared to do so whenever possible in future.

N. M. J. obviously does not appreciate the position at Guy's which is not that as a great favour we evacuate our "unwanted junk" to Pembury, but that, at any rate so far as children are concerned, we experience real difficulty in evacuating them at all. For practical purposes Pembury is the only hospital in Sector X to which we can send our children—though we have recently had assistance in this direction from the Kent and Sussex—and on some occasions it has been unable or disinclined to take them. A reason put forward to account for this disinclination is that once the children have been evacuated from London they cannot be sent back there because it is a danger area. So far as I know this is not the case, but even if it were, the argument is a little difficult to follow. Why, if London is a dangerous place for children, should they be kept there in hospital because if they were evacuated to Pembury it would be difficult to return them to the dangers of London? Perhaps, however, that is looking at it too much from the patient's point of view. My own personal view is that no child should be kept in hospital in London one moment longer than is necessary, and I have done my best to impress this on all my staff. I have been so worried about the accommodation for children in Sector X that I have discussed the problem with Sector headquarters, with Dr. Cameron, the consultant Adviser in Pediatrics to the Ministry, and with Professor Fraser, the Director-General of the E.M.S., who suggested trying Sector IX if Sector X headquarters had difficulty in disposing of children for me.

I should be very sorry to feel that the base hospitals consider our attitude towards them very odd—I was not even aware that there was an "attitude," and I am not prepared to take N. M. J. very seriously on this point unless I hear something about it from any of the medical superintendents of the base hospitals, whom I have always found most cordial and co-operative in their dealings with me.

I am afraid I don't "get" the allusions in the rest of paragraph 2. It has never entered my head to associate base hospitals with flint instruments or oracles. Had I ever considered the matter, however, I should not have been unduly disturbed, as a good deal of the equipment in use in these hospitals has been lent to them by Guy's, so presumably we are all using much the same sort of tools—or perhaps N. M. J. thinks that this equipment is also some of our "unwanted junk."

Am I doing N. M. J. an injustice in supposing that he regards Guy's as a mecca to which surgical and medical cases flock, some good, some bad, and that we sort these out here, keeping all the good stuff and sending all the junk to the base hospitals ? Guy's is not the mecca it used to be—our civilian sick bed state stands at round about sixty, not so much because we limit our admissions as because a large proportion of our considerably diminished numbers of out-patients prefer to go to a base hospital. I suppose it has something to do with bombs. We are not able to pick and choose as N. M. J. imagines we can and do.

Am I doing N. M. J. an injustice in suggesting that he has expressed sentiments which are neither kindly nor sympathetic ? London and even Guy's is being bombed, but he has no use for our "unwanted junk," Pembury is not a convalescent home and can get on very well without any cases from Guy's at all. I hope we at Guy's would feel differently about Pembury if Tunbridge Wells was being invaded.

Yours, etc.,
P. M. F. BISHOP.

Superintendent's Office,
Guy's Hospital, S.E.1.

"Evacuees of Orpington"

To the Editor of the GAZETTE

SIR,—Having recently been warded as a patient in the Orpington Hospital, I read with much interest the letter from the "Evacuees of Orpington."

I have heard for some time of the difficulties experienced by the wards for food for the patients, and have now experienced some of these with, I may add, little relish ; but by the labour and ingenuity of the nursing staff much of the food is made more palatable.

I would like to take this opportunity of expressing my admiration of the spirit shown by the sisters and nurses in surmounting many of the difficulties that arise. We can but hope that the Guy's motto may become more widely adopted.

Yours, etc.,
JOAN EPPS.

Orpington War Hospital,
Orpington,
Kent.

"Graded Meals"

To the Editor of the GAZETTE

SIR,—I regret that Mr. H. J. B. Atkins has found it necessary to disclaim authorship of my letter on "Graded Meals" ; as a matter of fact, I had not heard his name mentioned in the rather wild speculation on the identity of "Fair Play," but I have heard certain opinions expressed and regret that suspicion has fallen on several innocent people. I would like to offer may apologies to any colleague who, through my action, has felt himself to be under a cloud.

I feel that, apart from idle curiosity, the identity of "Fair Play" is of no consequence, so that, for the reasons which I gave in my letter, I do not propose to swallow the bait and reveal my identity.

The "Comparative Menu" has been discontinued, but in all other respects the situation remains unsatisfactory. It is to be hoped that the recently formed Representative Committee will be able to arrange a fair basis of allocation.

Yours, etc.,
"FAIR PLAY."

Guy's Hospital,
S.E.1.

The Royal College of Nursing, 1916-1941

THIS year The Royal College of Nursing celebrates its silver jubilee. It is fitting therefore that tribute should be paid to the Guy's people who had so much to do with its foundation. Twenty-five years ago, Dame Sarah Swift, ex matron of Guy's, Miss Haughton, matron of Guy's, Sir Cooper Perry, Superintendent of Guy's, and Sir Arthur Stanley, Treasurer of St. Thomas's Hospital, had the inspiration to launch The Royal College of Nursing. During the first month thirty-five members enrolled. To-day the membership stands at over thirty thousand. The College was instrumental in obtaining State Registration for nurses within three years of its beginning. Since then it has played a very large part in all the reforms and progress of the nursing profession, culminating in the establishment of a Division of Nursing at the Ministry of Health. Guy's nurses today are carrying on the work of their predecessors. Matron has served on the Council for many years. The present Council includes Miss D. M. Smith, Matron Middlesex Hospital, Miss M. Hughes, Matron Leicester Royal Infirmary, Miss M. Wenden, representing private nurses, Miss F. Taylor (Sister Florence) who is also chairman of the sister-tutor section. Miss Goodall, another Guy's nurse has been the tireless secretary of the College for a number of years.

We wish The Royal College every success in its future work.

Sport

Rugby

Guy's v. Bedford

(*Played at Bedford on Saturday, March 8th,* 1941.)

To beat Bedford on their own ground must be voted an excellent performance, and nobody was more jubilant than Kynaston, our popular captain, who incidentally played one of his best games this season.

Bedford have lost many players, but can still field a formidable side as they proved in this game. Guy's lacked the services of Strathie, Scott and Camp through injuries, and Gartrell was playing for London. Manning and Ripman of " Ex. A " fame were the halves and they worked and played so well that the " three's " had innumerable chances.

The game attracted an excellent crowd, and it was cheering to hear the shout " come on Guy's " from several parts of the enclosure.

The opening exchanges were even with both sides trying to open up the game, but the passing was faulty, and the tackling keen. Thevenard almost got over but stumbled near the line, and Bedford dribbled over the Guy's line for a drop-out. Guy's three-quarters indulged in some neat passing with Charlton prominent, and later a forward pass stopped a good movement.

Bedford set up a series of attacks but the Guy's defence was very solid, and in quick succession Guy's were forced to touch down from the Bedford rushes.

From a scrum in front of the Guy's posts, the ball came to Thevenard, who ran along the touch line and scored in the corner. Fielden made an excellent kick against a cross-wind to add the extra points, the ball hitting the cross-bar before going over.

Guy's fought back strongly and Kynaston kicked up-field for Charlton to make a dribble from which he gathered the ball from the bounce and touched down in the easiest of positions for Kynaston to convert. Guy.s continued to press until the half-time whistle blew with the score five all.

Some interpassing between Kynaston and Macrae-Gibson took Guy's to the Bedford line, but from the scrum Bedford dribbled and kicked to our line and Thevenard picked up to touch down between the posts for Feilden to kick the goal. The attempts of Guy's outsides to stop this rush were pitiful, trying to pick up as the ball is rolling to your line may look spectacular if it comes off, but fast moving forwards will invariably compel you to fumble, as you did in this movement.

The three-quarters regained their laurels when a passing movement initiated by Kynaston led to Brangwin giving a perfect pass to Charlton, who scored in the corner, too far our for Mullins to convert.

Guy's were all out to take the lead. Kynaston cut through with a nice dummy and almost reached the line, and the Bedford full back had his kick charged down for a drop-out. Guy's were awarded a penalty following a run by Kynaston and Macrae-Gibson, and Mullins kicked the goal from just inside the half-way line. Guy's leading 11—10.

It was Bedford's turn next and from a scrum on the Guy's line Kenney slipped over for an unconverted try. Guy's forwards were playing a very fine game, and Mullins tried to break through but was collared. A penalty kick against Guy's for off-side was goaled by Feilden and the game looked all over.

With determination Guy's made a spirited rally. Albers dribbled and Bedford found touch, Thevenard hit an upright from a drop kick, and Mullins called for a mark which was not allowed. A kick against Bedford set Guy's on the attack. Brangwin and Lee could not quite get clear, and Bedford forced us back.

Brangwin then proceeded to win the game. He picked up on the half-way line, ran clean through the opposition in the style of a seasoned sprinter to touch down under the posts, and Kynaston converted to bring the scores level. Only a few minutes to go, Guy's attacking, and well on top, out came the ball to the three-quarters, Brangwin is placed in possession and cutting through beautifully scored an excellent try, but Mullins failed to convert.

Guy's were pressing as the final whistle went, and the whole side are to be congratulated on their splendid fighting spirit when all seemed lost. The present Guy's side never say die until no-side is called. They dispute every inch of ground.

Score: Guy's, 2 goals, 1 penalty goal, 2 tries (19 points); Bedford 2 goals, 2 tries (16 points).

Team.—T. L. T. Lewis; D. W. F. Charlton, P. L. Brangwin, R. U. F. Kynaston (Captain), A. C. Macrae-Gibson; F. R. C. Manning, H. A. Ripman; J. D. Everall, R. M. Sharpe, A. B. Lee, A. G. Albers, J. R. C. Matthews, M. R. Mullins, T. W. Renton, G. F. Swann.

Guy's v. St. Thomas's Hospital

(At Honor Oak Park on Saturday, March 15th)

NOT since the 1936-37 Cup Semi-Final had we beaten St. Thomas's, but although the Cup atmosphere was missing, both sides put up a hard and dour struggle. We were very pleased to see our President, Mr. T. J. Evans, at the match. He has always taken a very keen interest in the club.

Guy's fielded what is now considered their strongest side. Strathie made a welcomed reappearance and judging on his display he has lost none of his skill since his enforced absence.

Some of the referee's decisions were somewhat difficult to understand, and Guy's were the biggest sufferers. In the first few minutes they were penalised for " feet up," and following a break through by Strathie and Brangwin, were again penalised from which Ritchie kicked a penalty goal.

A Guy's forward rush was followed by Strathie kicking across to Camp, who gathered neatly and touched down in the corner, Mullins being just wide with a difficult kick.

A St. Thomas's forward rush was repulsed, and Strathie cut through nicely but had no support. An obvious knock-on by St. Thomas's was allowed to proceed, and then Strathie made an opening to give Gartrell a pass which sent him over for a try, although hampered by two opponents. Mullins made an excellent kick and converted.

Brangwin picked up in his own '25 and ran clean through the opposition to touch down between the posts, and Kynaston added the extra points. Once again Guy's were penalised for " feet up " and Ritchie kicked another goal. St. Thomas's tried a drop which looked very close, but the decision was against them.

Camp was almost clear from Strathie's pass but a defender got his ankle in the nick of time. Camp might have got through again but he received a bad pass. Brangwin and Kynaston passing nicely made ground and the latter sent Gartrell in for a good try near the corner, which was not converted.

Guy's continued to have the upper hand, but Brangwin went off with a pulled thigh muscle. Swann was taken out of the pack and placed on the wing, Gartrell going to right centre. A wild pass stopped a promising Guy's movement, but Guy's kept up the attack, and from a loose scrum Scott went over for an unconverted try. Half-time arriving with Guy's leading 19—3.

St. Thomas's had more of the play in the second half, and Guy's seven forwards were severely handicapped in the line-outs and in the loose. Gartrell was pulled up, being adjudged to have given a forward pass. Sharpe and Mullins handled nicely and Strathie getting possession neatly dropped a goal. Strathie all through had varied his game nicely and occasionally sent out some long passes, which should have been turned to better account. A St. Thomas's forward dribbled and propelled the ball forward with his hand, but the referee must have been unsighted. Twice again Guy's were penalised, but in between the two kicks which were unproductive Parker went over for a try for St. Thomas's, which Ritchie failed to convert.

Guy's were being hard pressed, and in an effort to get clear, there was some very wild passing in our '25. A St. Thomas's man once received a peach of a pass from one of our " three's," and a little later Peters, the St. Thomas's scrum half, went over for a try, which Ritchie goaled.

Two more kicks against Guy's, and then Parker handing off as he ran, was stopped by Swann. Gartrell and Camp had a good run, but Ritchie kicked to touch. St. Thomas's were attacking strongly but Strathie broke through only to have his pass adjudged forward. Wade sold a beautiful dummy and sent Parker over, but no try was awarded as he had previously gone into touch. A St. Thomas's man went down on the ball and stayed there, but a kick was given against Guy's. As Strathie took a wild pass and kicked to touch no-side was called, and so we had beaten St. Thomas's for the first time for five years.

Score: Guy's, 2 goals, 3 tries, 1 dropped goal; (23 points); St. Thomas's, 1 goal, 1 try, 2 penalty goals (14 points).

Team.—T. L. T. Lewis; R. F. Camp, P. L. Brangwin, R. U. F. Kynaston (Captain), P. C. Gartrell; D. M. Strathie, N. I. Scott; J. D. Everall, R. M. Sharpe, A. B. Lee, A. G. Albers; J. R. C. Matthews, M. R. Mullins, T. W. Renton, G. F. Swann.

Notice

ERRATUM

With reference to my letter in the *Gazette* of April 19th, 1941, under the heading " Farewell to the College," on p. 97, the first line of letter should read: " The recent letter of Dr. P. M. F. Bishop." On p. 98, lines 10 and 11, instead of " R. H. Ince, now Major-General Sir Richard Ince," etc., should read: " R. H. Luce, now Major-General Sir Richard Luce, K.C.M.G."

Yours, etc.,

R. H. FAGGE.

Hospital Information, etc.

CONJOINT BOARD
FINAL EXAMINATION

April, 1941

Medicine

*J. E. Bulow
*N. Rendell-Baker
A. G. Beaton
D. W. Burgess
D. H. Crook
*P. S. Cuthbertson
*G. J. L. Davies
J. A. Gillett
*R. C. Hallam
M. P. Hutchinson
*J. K. Martin
*G. C. Price
W. Richt
L. Robinson
*B. Rowlatt
G. P. A. Sechiari
*T. H. S. Smith
*P. A. J. Smith
*C. C. Spicer
*J. S. Stead
A. W. P. Stone
*J. G. Stubbs
*J. Williams

Midwifery

S. H. Bockner
J. W. A. Crabtree
P. B. Counsell
W. G. Cross
M. C. Cross
F. K. Crittenden
D. G. Dixon
D. P. Finnegan
J. G. Goodhart
D. H. King
B. Kustow
N. P. W. Littler
G. H. T. Lloyd
V. H. Martindale
V. J. McLean
W. F. Miller
A. T. Moorhouse
P. B. Maxted
A. C. Parkinson
W. H. Petty
D. D. L. Rees
B. J. Stephens
S. D. Stock
D. G. Vulliamy
R. West
J. Wilks

Pathology

P. Baxter
J. P. Bull
N. F. Clarke
R. A. Craig
D. H. Crook
B. Frank
N. Gillman
J. R. Lauder
R. J. W. Rees
H. A. Ripman
M. Ash Wiggins

Surgery

*L. Rendell-Baker
*C. L. F. Beaton
J. W. A. Crabtree
M. C. Cross
*C. H. Dunn
*L. P. R. Fourman
*R. M. de Gregory
J. G. Goodhart
B. P. Griffin
J. H. G. Halliday
*R. C. Hallam
L. R. McLaren
*L. G. C. Martin
J. P. H. Ogilvie
W. A. Porter
F. R. Russell
R. M. Sharpe
A. L. H. Smith
*P. A. J. Smith
*T. H. S. Smith
*C. C. Spicer
G. W. Taylor
A. E. Thomas
D. P. Walther
*J. A. Williams
*J. Williams

* Have now completed the examination.

UNIVERSITY OF LONDON
SECOND EXAMINATION FOR MEDICAL DEGREES

March ,1941

R. A. Allen
D. H. Broughton
E. H. Couper
M. D. Cremin
M. J. Cutler
M. E. Evans
J. Fry
C. O. Fung-Kee-Fung
K. M. Gough
P. W. T. Hollis
W. C. Johnson
J. V. Kent
F. R. S. Knight
K. A. MacDonald
R. Merryweather
W. S. Morgan
L. P. Ribet
J. A. Riddle
D. R. S. Saunders
N. J. Shah
A. G. I. Stockley
R. C. W. Thompson
T. E. van Perlstein

Anatomy

F. J. Aumonier
A. B. Dickie
D. D. Forbes
A. J. P. Graham
M. D. Keates

Physiology

P. D. Bryant

UNIVERSITY OF LONDON
PH.D. EXAMINATION

March, 1941

Faculty of Science

W. T. Weller

UNIVERSITY OF LONDON
SECOND EXAMINATION FOR MEDICAL DEGREES

(*For Internal Students*)

The following candidates have now completed the examination under the old regulations by passing in Pharmacology.

H. C. Mukerji M. N. Teubes H. W. Bunn

Changes of Address

H. G. Close, M.D., Pathologist, The Southern Hospital, Dartford, Kent.

Robert Kark, Flying Officer, R.C.A.F., Headquarters British Commonwealth Air Training Plan, Toronto, Canada.

Births

BISHOP.—On April 20th, 1941, at The Brook, Sawston, Cambs., to Phyllis, wife of Dr. P. M. F. Bishop, The Warden's House, Guy's Hospital, a daughter.

RECKITT.—On April 3rd, 1941, to Mollie (*nee* Harrison-Taylor), wife of Major V. B. Reckitt, R.A.M.C., a second daughter, Miranda Harrison.

Deaths

MORGAN.—On Sunday, April 20th, 1941, at 35 North Parade, Aberystwyth, Morgan John Morgan, M.A.(Brux.), M.R.C.S., L.R.C.P., D.P.H.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV 17*th May* 1941 *Number* 1378

PASSIM

ONE of the most interesting and good-natured of all our casualties was the "double amputation" who came in on the Wednesday night blitz; this poor man had had both his lower limbs shattered and blown off while on local fire duty, but in spite of his bad luck he never had anything but a smile for every-one, and even when his pain and misery were worst he inspired fortitude by calmly reaching out and smoking a cigarette. There were many similar tragedies on that dreadful night when neither rank, sex nor age were spared. Bombs rained down minute after minute, sometimes two and three a minute, sometimes coming much too close, sometimes echoing in the distance. Inevitably their arrival would be heralded by a nerve-racking whistle increasing in intensity until the atmosphere shivered around us, and ending up in a splintering soul-shattering crash which stirred the most hardened blitz veterans among us. Some of the bombs were so close to the hospital that every few minutes throughout the night even the massive and solidly-constructed buildings rocked as though their foundations were made out of hinges. Fortunately a large proportion of the population that we serve has either evacuated itself or acquired adequate shelter accommodation. In any case, the number of casualties was small and really no index to the size of the raid or its distribution; as might be guessed, it had its maximum effect on property, and once again Guy's has assumed another battle scar. This time the loss is of great sentimental value, for now only the charred walls are all that remain of the Superintendent's house and the Counting House. While most of the furniture and furnishings were saved, again largely due to the efforts of the student body, the beautiful Court Room with its magnificent Jacobean staircase approach no longer exists; even the *Gazette* office was destroyed. It is to be hoped that when a new Guy's rises after the war, if it is not possible to restore this damaged beauty, at least its equivalent will be built to carry on the tradition that is Guy's Hospital.

It is really incredible how quickly we all return to normal after these episodes; in a matter of hours everybody has settled down to their everyday routine, the ward work and teaching begin again, the out-patient numbers increase daily, and even the forgotten petty grumbles fan up again. But it is a fine tribute to our administration that its wheels can continue to turn so evenly in spite of Herr Hitler's interruptions.

And so the hospital life ran on until last Saturday night, when once again the enemy paid us a visit. There is a great deal of speculation as to which of the two raids was the severest; although Guy's escaped a direct hit this time, that it did so is nothing short of a miracle, for bombs were falling fast and furiously from all directions. By next morning we were covered by a snow of finely-divided debris from adjacent buildings which, together with that choking burning odour that charged the atmosphere, made one distinctly uncomfortable.

There can be no clearer proof that the German bombing is indiscriminate than the large number of bombs that fell and exploded among the rubble. Many a fire was started in the charred super-structure of a building already the victim of a previous raid. The sight of that hugh crater in the yard behind where the "Ship and Shovel" once stood, made more than one Guy's person offer up a prayer to our guardian Angel. It is also rather doubtful whether any of our financially pressed students will ever find relief again in the local pawnshop.

Unfortunately, the stream of casualties was a fairly heavy one, and very early in the night everyone was so occupied in their duties that there was scarcely time to consider the commotion taking place all around. Our nursing and medical staffs carried on without a stop, attending to patient after patient, and only pausing when a relief team arrived on the scene. By the light of next morning their faces were drawn and tight, even haggard, but set with a grim determination to carry on their humane part in this war against Germany.

The next day brought with it the task of evacuation of our sick and wounded to base hospitals; all morning the sorting of patients according to their injury or disease went on, and the clatter of the typewriters as the Almoners typed out the dictated records of each patient, reminded one of the machine-gunning in the air the night before. Early in the afternoon ambulance after ambulance rolled through the "Memorial Gates," and the arduous task of stretcher bearing began. The whole business was swiftly done, adequate care being taken that each patient was made comfortable. Because of the large numbers of cases, the patients' relatives and friends, many of them Service people, were asked to volunteer their help. Even some of the honoraries took part in the stretcher bearing; it was indeed an inspiring sight to see Professor Ryle and Mr. Doherty carrying patient after patient to the waiting buses. That afternoon we said good-bye to our smiling "double amputation" patient; appropriately enough, he was carried down the wooden emergency stairs from Addison Ward by an Air Force gunner at one end of the stretcher and a Naval Rating at the other end.

Cases of Dental Abscess which have Endangered Life

A Clinical Lecture delivered in the Medical School, Guy's Hospital, on Monday, April 7th, 1941, by F. N. Doubleday, L.R.C.P.Lond., M.R.C.S., L.D.S.Eng.

GENTLEMEN,—Dental abscess may endanger the patient's life immediately, as a result of the severity of the infection, or remotely, as a sequence to chronic infection long continued. It is the acute cases of which I wish to speak this morning. The normal stream of dental practise runs smoothly, sometimes its even tenure is rudely disturbed by such violent crises as are here recorded. It is then that the practitioner turns to his medical colleagues for help. The pathological principles and the sound lines of treatment are the subjects we consider now.

Dental abscess is commonly the result of direct spread of infection from the tooth pulp into the peri-apical tissue surrounding the tooth; occasionally it follows severe infection in pyorrhœ pockets; it may be the sequel to a blood-borne infection such as may follow, e.g., from an osteomyelitis of the long bones. Several operations for the removal of teeth, if followed by infection, may cause severe abscess and osteo-myelitis in the bone.

The course of a dental abscess is as follows: After infection there is an incubation period of about forty-eight hours, during which there are few symptoms except, perhaps, uneasiness in the tooth; then follows a period of severe pain, increasing tenderness on pressure, and looseness. During this time the toxins are decalcying and peptonising the bone surrounding the tooth socket, through which a way is made towards the surface. When the periosteum is reached, an important stage in the illness has occurred. If the periosteum is speedily penetrated the pus which has formed is evacuated upon the surface and in time the abscess subsides. There are two main types of such abscess: those in which the chief infection is staphylococcal—in these a chronic local abscess or gumboil results; and those cases in which streptococcal infection predominates, and here cellulitis of the soft parts is the immediate sequel. Unpleasant as both these types are, the real difficulty in the cases described below usually arises within the bone or immediately beneath the periosteum. In the maxilla the bone is thin and shell-like; as a rule pus makes its way out quite well, although in some cases an abscess may burst into the maxillary sinus. Osteomyelitis of the maxilla does occur, but here, owing to the character of the bone, drainage is easily established. In the mandible it is different, the mandible is surrounded by a thick U-shaped layer of compact bone of an ivory consistency, inside this is a considerable amount of cancellous bone and the canal containing the inferior alveolar vessels and nerves. When a tooth abscess occurs and effectual drainage does not take place through the outer alveolar plate, an osteomyelitis may commence and spread rapidly within the substance of the mandible, and to give effectual relief is not easy. The dense ivory charactor of the U-shaped cortical bone makes drainage beneath the mandible a difficult thing to establish, as the following cases illustrate.

Col. B., aet. 42, was a medical officer in the Army of the Rhine. In 1920 he went to the dental centre for the removal of a lower third molar. The dental officer to whom he went gave him an intra-alveolar injection of novocain, the solution being introduced through a small hole drilled through the bone of the mandible. The tooth was removed without incident, so far as it was possible to tell infection occurred through the hole drilled into the mandible. The effect was to cause a rapidly spreading osteomyelitis which extended from the left lower third molar region rapidly to the canine region upon the opposite side. The army surgeon who had charge of the case made incisions and chiselled away the bone from below. The patient recovered after many weeks of severe illness, but with such external scarring and deformity that he had to grow a beard.

Mrs. R., aet. 34, went to a dental surgeon at the beginning of December, 1926, and he made a crown upon her lower first molar. Unfortunately, an abscess soon developed upon this tooth, and on Christmas Eve an acute abscess developed. The dental surgeon attempted to remove the tooth under gas, but it fractured and one root was left; a second attempt to remove this root was unsuccessful, and the patient developed an osteomyelitis of the mandible with an uneven temperature ranging up to 104°-5°, rapid pulse and severe symptoms of toxæmia. A surgeon was called in who made an extensive incision beneath the mandible and chiselled away the body of the bone from below. During the operation the mandible fractured, and I was called upon on January 19th, 1927, to treat the fracture. Up to that time no skiagram had been taken. When this difficulty had been overcome by the use of a portable X-ray apparatus, the root was localised and removed and drainage established from the tooth socket. Within forty-eight hours the temperature came down to the neighbourhood of 100°, and the patient eventually made a full recovery, but with considerable scarring of her neck.

A lesser but unfortunate feature of this case was that the patient's husband induced the dental surgeon to write a letter saying that he would be responsible for all expenses incurred as the result of the abscess. When he found what these were likely to be, he appealed to a much advertised society, with a well-sounding name, to which he had belonged for some years. He was then informed that the society was a debt-collecting agency which did not defend its members from legal actions. I should like to urge all of you when you qualify to at once join the Medical Defence Union or the London and Counties Medical Protection Society. If you are connected with a case in which there is any possibility of legal complications do not say or write anything without first obtaining the advice of one of these two experienced and competent organisations.

From these cases you will see that incision and drainage along the lower border of the mandible, although this is the most dependent position, does not always produce satisfactory drainage, and it may have serious results. Scarring of the face which occurred in both these cases, and fracture of the mandible, which resulted in one, are very serious sequelæ. In the mandible, drainage is best secured by turning back a mucoperiosteal flap and then chiselling away the outer alveolar plate so that the inner part of the body becomes converted into a gutter, which can be kept open and drained by a strip of quarter-inch ribbon gauze soaked in B.I.P.P. The chisel used should have a narrow gauge and a long chamfer, the bone being removed in small segments. This can be done with the narrowest gauge of chisel used for operating upon the mastoid cells. I often find that practitioners who have not experience of B.I.P.P. think it an unpleasant preparation to use in the mouth. During the last war I worked for a year in an experimental ward under the eye of officials from the Medical Department of the War Office. We used every known variety of dressing and of drainage. The one which gave me the best results in these very infected gunshot wounds was B.I.P.P. Infected mouth wounds are very similar, and I have used this preparation ever since with great success and without finding that private patients or their friends raise any objection either to the taste or to the smell. Its efficiency may depend upon the iodine slowly liberated from the iodoform when in contact with moist tissues, or from the bland non-irritating effect of the liquid paraffin, which is no doubt similar in its action to the sterile vaseline now used for dressings. But I believe that it depends mainly upon the very definite leucocytosis which it causes. When you remove such a dressing as I describe, you find it to be thickly coated with serum and polymorphonuclear leucocytes.

During the last war, Professor Hamburger[1] showed that phagocytosis took place much more actively in the presence of certain concentrations of iodoform. This action he attributed to the fact that the outer layer of individual cells consists of a fatty substance forming a lipoid surface.

Iodoform is soluble in fat, and he held that such a surface will grown more soft and flexible after having absorbed iodoform, and that consequently the plasticity and mobility will be facilitated. Professor Garrod,[2] in the manual upon "Wound Infection," edited by Mr. Ogilvie, argues that B.I.P.P. must be useless because the iodoform is embedded in an oily paste. I believe in the use of B.I.P.P., because for many years in difficult cases I have found it to yield amazingly satisfactory results in cases of mixed infection, provided that drainage is rightly planned and adequate and that no foreign bodies remain in the depths of the wound. I do beg of you, when you have a suitable case, to try it. There is only one method by which to prove or disprove such a point as this, and that is to follow the example of John Hunter and to use the method of direct clinical observation, *experimentum docet*. It is to be noted that the extreme degree of dilution (1-500,000) found to be most efficacious by Professor Hamburger is such a one as may be established in the tissues.

So far I have spoken of osteomyelitis commencing in the body of the mandible. Now may I point out that such cases arise frequently after the removal of a mandibular third molar. The reason is that its position at the back of the mouth makes it difficult to keep clean. When a tooth has been removed the normal method of healing is for the socket to fill with blood clot, in which organisation takes place, fibrous tissue is formed, and eventually the alveolar portion of the bone, which has for its function the support of the teeth, is absorbed and the superior surface of the body of the bone becomes built over with new compact bone. If after an operation for the removal of a difficult tooth excessive gum flaps are left which fall over the margins of the wound and prevent drainage, this favours the collection of food and infected material in the wound and the danger is increased by the difficulty of effectually using hot mouth baths at the back of the mouth. It is good practise to have the wound syringed every four hours with realy hot Dettol solution used in a Tonybee ear syringe, the long nozzle enables this to be used well back in the mouth. The high pressure syringes used in dental practise may be dangerous if they force infection more deeply into the wound. Another factor is that the bulk of a third molar is such that often the blood clot when it shrinks does not adequately fill the whole wound, and so leaves a cavity in which infected material can collect. If hæmolytic streptococci are present and break up the blood-clot the risk of these complications is greatly increased. As you will see from the skiagrams which are thrown upon the screen an unerupted third molar is often situated deeply in the body of the mandible, in close relation with the inferior alveolar canal. When infection occurs in its socket, it may spread through the cancellous tissue in the body of the bone if, for reasons given above, drainage is imperfect. Osteo-myelitis commencing as an abscess upon the root of a deciduous tooth and involving the crypts of the unerupted permanent teeth beneath them sometimes presents as a very serious illness. If the crypts of the permanent teeth are involved the only satisfactory treatment is to operate as already described and to lay open from above, as a continuous gutter, all those tooth-crypts which are involved; drainage must then be maintained. Osteo-myelitis of the jaw may be secondary to infection in other parts of the body.

Wilfred Pruth, aet. 12-6, was admitted under Mr. Turner on February 7th, 1933. He was an inmate of a Jewish Orphanage, and as the result of an injury received while he was playing he developed an osteo-myelitis of the right radius. For this an operation was performed on the evening of his admission to Guy's. A week later, on February 15th, I was asked to see him in the ward because he complained of toothache. The pain was of a dull aching character, centred in the region of the right lower premolar teeth. There was no evidence of dental trouble, either clinically or with X-rays. My house-surgeon examined the boy twice during the week without finding anything more. In spite of the absence of apparent cause, by February 21st he had severe pain and a swelling in the substance of the jaw had developed causing looseness of the teeth, the temperature was 102°, pulse 105, respirations 20. At the request of Mr. Turner I operated upon the boy that day, removing the teeth in the area and opening up a gutter of bone, such as I have described, and maintaining drainage. This case was undoubtedly an osteomyelitis of the jaw, secondary to the condition already existing in the radius. After a sharp illness the boy made a full recovery.

I have illustrated for you some of the very severe conditions which may complicate an apparently simple tooth operation. Let me now sum up the treatment. The first thing is for the dental surgeon to avoid difficulties by the knowledge and correct handling of the operation. Then the after-treatment consists in the use of mouths baths, as hot as the patient can bear them, four-hourly for the first forty-eight hours, and then after each meal for a week or ten days, until the wound has healed from the bottom. Patients, and sometimes even nursing homes, are halfhearted in this essential treatment. If the temperature chart and the patient's pulse show that infection is occurring, fresh skiagrams must be taken to make sure that no part of the tooth remains. Drainage must be secured by regular syringing of the wound and by preventing the premature closing of the surface of an infected wound; this is a difficulty which occurs very readily in all mouth operations. The patient must be kept at rest in bed, on a light nourishing diet with plenty of fluids. The bowels must be kept open, pil. colycynth et hyoscyamus, which acts upon the large bowel, followed by salts, is especially valuable for this purpose. The administration of sulphonamides is indicated in all cases of streptococcal infection. Many jaw cases are due to very mixed infections resulting from the growth of streptococci and staphylococci in symbiosis. On this ground I generally, in severe cases. administer sulphonamides internally for the first three days, then wait forty-eight hours, and if the temperature has not come down and the pus is of that thick creamy character associated with staphylococcal infection, give colloidal manganese by intramuscular injection. The violet dyes may also be tried by swabbing and syringing. Sometimes a case in the mandible is associated with foul smelling pus containing gas, and is due to a B.C.C. infection, probably conveyed by the patient's hands. Of course, confirmation of any type of bacterial infection is obtained by cultures and by serum reactions. Real benefit often follows the intra-muscular injection of colloidal calcium. Hamburger, in the paper to which I have already referred, proves that calcium increases the activity of the leucocytes. Weston Price[3] and others have shown that in chronic dental infections the ionic calcium of the blood is often abnormally low, its exhibition is therefore indicated in these cases. Lastly, may I remind you how vital is the moral influence of the doctor in all cases of serious illness. Provided that your examination of the patient is based on knowledge, your influence over the patient and upon the friends will do great good.

REFERENCES

1 Hamburger, H. J. Researches on Phagocytosis. *B.M.J.*, 1916, p. 37.

2 Garrod, Professor. Wound Infection. Ed. W. H. Ogilvie. *Lancet War Primers*. London, 1940.

3 Price, Weston. Dental Infections. Pentland Publishing Co., Cleveland, Ohio. 1927.

Sector News

Guy's Letter

THOSE who lived in the College before the war and who remember Dr. and Mrs. Bishop's small son as he beamed on them from his pram in the Lodge, will wish to be first to congratulate the deputy superintendent and his wife on the birth, recently, of a daughter.

It is reported that at a recent lecture Mr. Wass used the epidiascope. Whilst he exhibited on the screen a surgical specimen some biological creature alighted on the lens and threw upon the wall a hideous monster with wings, suckers and a stomer. The audience saw this horror sharpen its sting and eye the lecturer, who thereupon thrashed the screen with such violence as nearly to break his pointer. A flick of Ireland's finger over the projector drove off the menace, leaving Mr. Wass suffused at what our reporter was unable to decide was pride in victory or embarrassment at misdirected attack.

In the last issue of the *Gazette* we mentioned the rubbish in the Park and also the presence of valuable hospital equipment in disused wards. The deputy superintendent has given permission for us to publish his comments on both these subjects.

The removal of the debris has been held up by the Government's delay in taking its choice of the scrap metal which it has a right to acquire. This being done, the way is smoothed for the immediate clearance of the rest of the metal, the bricks, and the wood, which, happily, disappear daily in a barrow.

As regards the equipment in the wards, this is there for a purpose. Those wards are an emergency overflow for air-raid casualties.

If these, then, are the answers, we can only remind ourselves of the words of a Peter in Biblical times: "For ye were as sheep going astray; but are now returned into the Shepherd and Bishop of your souls."

R. T. H.

Orpington Letter

SINCE last we wrote, the Clinical Medicine of the London M.B. has been held here, and we have been happy to welcome many Guy's men from other hospitals for this awe-inspiring academic battle. We trust that Sir Adolph Abrahams took no offence when one of our staff mistook him for a candidate.

We have broken a record—we have had a birth in the hospital, and the one and only midwifery case the hospital has ever known—an air raid victim—we delivered under caudal block anæsthesia. In our agitation, we sent to Farnborough for a pair of forceps, while we ourselves lay on the floor in the left lateral position trying to work out whether the occiput or nose would point upwards; but the baby—all 8 lbs. of it—arrived before the forceps.

With the longer summer time, hockey has again begun in the evenings, while an occasional game of tennis may be witnessed on the courts behind the mess. In fact, Spring is here; but on the other effects of its advent, we shall not comment.

B. J. D.

Pembury Letter

THE rustic representative of Sector 10 has little to report this week. The trees are beginning to sprout their leaves again, and the hospital's intensive horticultural effort is now showing above ground; though your scribe's personal effort in the same sphere can claim no such distinction. Worse still, however, is the achievement of two other members of our staff, who, being presented with six onions, planted them in the hope that they would multiply like potatoes.

The new appointments have brought Beaton to the Resident's Flat. We welcome him, and hope he will have a happy sojourn at Pembury. Among our many attractions may be mentioned the reopening of Woodsgate Pool. Tom Lewis was the first to break the ice, and if we know anything, Mike Mullins wasn't a bad second. We expect that as the weather gets warmer, other torsos that became familiar last year will again be exhibited.

Many of our nurses are now engaged in their "State Finals," and we trust that all of them will soon be signing themselves "S.R.N."

N. M. J.

Farnborough Letter

AFTER many months of empty idleness the Children's Block is now at length in use. The children moved in about a fortnight ago; unfortunately, other forms of life also moved in, and a feverish struggle for existence has been raging between the children and nurses on the one hand, and legions of streptococci and non-lactose-fermenters on the other. Happily the human elements are now emerging victorious.

There was no ceremonial opening. If there had been, one could have imagined a house-proud lay committee feasting their eyes on the exterior of the block, while inside a despondent pædiatrician tore his hair in indignant consternation. But to turn from fancy to fact, it was discovered on actually moving in that there was no refrigerating or sterilising plant in the building—so that makeshift arrangements had to be devised for preparing feeds and cleansing bedpans. There were piles of shining bowls and dishes but no forceps for handling soiled napkins, so that this had to be done by the nurses' fingers. These difficulties could be overcome fairly readily, but there are other inherent in the design of the building itself. The single corridor along which the wardlets are disposed on each floor is so broken up by angles and corners that, despite the provision of much glass in the dividing walls the nurses' ability to see what is going on in neighbouring compartments is very restricted. A very well-established principle in Nature has been most blatantly contravened by placing the kitchen and the sluice in adjacent rooms. Lastly, the journey which a child has to make from its bed to the opertaing theatre is about as long and circuitous as it could be. We understand that this last circumstance is due to the fact that the block as it now stands represents only a part originally planned which was to have included a new theatre. Most of the above drawbacks have now been either remedied or neutralised; we have listed them not by way of destructive criticism but as illustrating in local colour some aspects of the oft-neglected but very important subject of hygiene.

Now that both the obstetric and the children's departments are housed in modern quarters, the appointment of obstretric dresser, with which is combined the children's clerkship, should prove exceptionally agreeable. These departments are also free from the main scourge which stultifies the activities of their medical and surgical counterparts, namely, the presence of the chronically sick and aged in their acute wards. We have written a jeremiad on this topic before, but this time we see a spark of hope in the report that another hospital in the Sector has recently evacuated five hundred chronic patients to a new home somewhere in the West.

V. C.

Guy's Hospital Gazette

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Correspondence

"Farewell to the College"

To the Editor of the GAZETTE

SIR,—The letter of R. H. Fagge that appeared in the last issue of the *Gazette* recalled to me vividly the great celebration on the opening of the College. I shall never forget passing Sir E. C. Perry and Mr. Gladstone standing and talking by the Porter's Lodge (fifty years ago). As a contemporary H.S. of Fagge's I entirely agree that we were all immensely impressed with the comforts and glories of the College, and when I went into residence in January, 1895, we all literally gloried in the magnificence of our tiny sitting-rooms, although we had little time or inclination to use them.

What a relief—to such surroundings of discomfort as a temporary lunch room in Hunt's House, and a bare room with the most meagre furniture and a still more doleful fire to sit out in after feeding—was the College dining hall and the smoking room.

We must now be about of equal age, approaching 72, yet the whole picture of hospital life, aye! indeed, and "Medicine" and thought, has radically changed in our lifetime. Sir Frederick Hopkins, late President of The Royal Society, was, I believe, one of my externs when I was in Charity. He was the author of "Vitamins," and from his discoveries have flowed world-wide advances. Bio-chemistry was but a tiny fœtus. Antisepsis was there, it consisted of perchloride of mercury and 1-20 carbolic. The results were extraordinarily good. Some suppuration of wounds was common, but of no serious moment. Puerperal fever in the Charity (3,300 cases per annum)—such a supply of babies would make the Charities of to-day chuckle with delight—was unknown, owing to our devotion to perchloride.

About the year '91, I recall a little talk in the old operating theatre, which illustrates most graphically the thought of the time. Mr. Clement Lucas turned to Mr. Davies Colley and said, "That's an old coat you are operating in." "Ha ! Ha ! it is twelve years old or thereabouts." "Mine, I confess, is only seven years." Between '92 and '95 Mr. Lane had changed the whole scene by the introduction of aprons soaked in 1-20 carbolic acid and mackintoshes. His hands withstood the attacks of the lotions, but oh ! his poor boys were gruesome martyrs with hands covered with painful "cracks" which made it impossible to ever clean them, and they remained black and loathsome to look upon.

We old boys recall with delight the old front surgery, modified by the lapse of time that wipes out the drawbacks and illuminates our friendships and our gaieties. Nurse Phyllis and Mr. Sutton; the smoky old fireplace; the stern stiff-backed wooden chair backed by a great coal box that stood at the far end of the room. The dirty little passage leading to the dressing room—a dusty broken-down old chamber, but in memory so cosy—where the "wasters" played solo-whist with dirty cards whilst falling all over the gruesome hairy bedraggled sofa. The sanitary arrangements attached to the dressing room frankly beggar modern imagination. I feel sure that Thomas Guy or his friends must have slept in the H.S. room, the bed was so old and all the surroundings of an antiquity contemporary with Queen Anne. Nevertheless, we loved it all—it was home, and we were all "good pals," the highest factor of life at its start.

Yours, etc.,
VAUGHAN PENDRED.

Globe Cottage,
Telford.

Replacement of Destroyed Books

To the Editor of the GAZETTE

SIR,—In a recent "Passim" you stated that the suggestion had been made that publishers of journals should print and reserve a number of extra copies in order to replace after the War libraries destroyed by the Huns. Professor Wright had already written to America with a view to obtaining support for such a reserve in the United States, and it is to be hoped that a scheme can be drawn up which will ensure that replacements will be available not only for most of the important British libraries, but also for some Continental universities.

Certain British journals have already agreed to print and retain a number of extra copies for this purpose. The number of copies available will, however, be limited for various reasons, and will probably not meet the demands. There is a large number of individuals who subscribe to scientific, or semi-scientific medical journals (such as the *Brit. Journ. Surgery*, *Journ. Physiology*, *Journ. Pathology and Nature*), but who do not bind and keep them. It is important that every effort should be made to keep as many copies as possible of such journals. These would form a further reserve for our own libraries, while sets would constitute a valuable means of exchange for American and Scandinavian journals. It may be noted that the major part of the Hospital series of the *Journal of Hygiene* was obtained by the sale of a duplicate set of the *British Journal of Experimental Pathology* which was given by a private person.

Yours, etc.,

J. C. COLBECK, M.B.,B.S.

Ministry of Health,
Emergency Pathological Service.

" Pembury Letter "

To the Editor of the GAZETTE

SIR,—By allowing Dr. Bishop a preview of my last " Pembury Letter," you have turned what was meant to be humorous into something acutely controversial. (Do I hear you murmur, "What a peculiar sense of humour ? ") If it is to be your habit to allow people previews of what I write, why not go the whole hog and send them down here to psycho-analyse me, so that they can determine my thoughts before I write them. Thus you could publish their answers at least a fortnight before the " Pembury Letter " appears in print ! As I have said, my effort was intended to be humorous, and had it been printed alone, would no doubt have passed as such with the great majority. Instead, I now find an attitude of " Gad, Sir, some bounder has had the indecency to criticise Guy's. Damme, it isn't cricket." How very different from the roars of applause when the criticism is directed in another quarter. I find it difficult to bring the matter on to a serious plane, but I will try.

Dr. Bishop's explanation as to why no tuberculous cases are sent to Pembury I accept unreservedly, but of the others that are sent, most are apyrexial and asymptomatic (at Pembury we call them convalescent). We don't mind taking them a bit ; but couldn't we sometimes have a few with just a fragment of a symptom ? If we can't, we are apt to think you look upon us as a convalescent home.

Dr. Bishop is at great pains to point out that the evacuation of children causes him great difficulty, and this I don't doubt. But then he seems to suggest that it is due to a disinclination on our part to take them. Excuse me smiling, but even if we did register disinclination, or if we registered all the facial and bodily contortions that earn a film star an annual fortune, we still couldn't refuse to take the cases. It seems to me that nothing less than an epidemic can keep unwanted cases out of Pembury, and once in, nothing short of H.E. can remove them if they don't want to go. That is one aspect of medicine which fortunately bomb-stricken Guy's does not have to deal with. I must go even further, and say that not only are we not disinclined to take Guy's children, but we hope soon to open another building with thirty-forty beds, so that even if we have infectious disease in one building we shall still be able to continue taking Guy's cases into the other. Does that sound like we are hindering your efforts, and will have nothing to do with your " unwanted junk " ?

Dr. Bishop is unwilling to believe that Guy's has an " odd attitude " towards the base hospitals. Well, Sir, let us take your very own " Passim " of April 19th as an example. Here you tell us " The need for up-to-date text books is now greater than ever before because many teachers are no longer engaged in teaching, and also because students are scattered about in base hospitals and accordingly must rely more upon themselves and reading for their medical education." The last part of this amazing mouthful is decidedly odd, though some people may spell " odd "— R-U-D-E. I could quote other examples, but let that suffice, for you are the mouthpiece of Guy's.

I trust, Sir, that I have done something to justify my erstwhile would-be humorous, previewed, misused, misconstrued article. If it failed to bring a smile to your lips, let not the venom drip from your fangs.

Yours, etc.,

N. M. JACOBY.

" Windflowers,"
Pembury,
Kent.

" A Plan for a Post-War Guy's "

To the Editor of the GAZETTE

SIR,—" Cosmos " remarked in a recent letter to the *Gazette* that " . . . we propose to describe our conception of an ideal post-war Guy's. It is for others to tear us to bits and make their contribution." I am not quite clear whether " Cosmos " is more than one person, or somebody " very high up " who is in a position to use the royal " we." For the purposes of this letter I shall treat him (or them) as singular ! Nor shall I take him at his word and tear him to bits, partly because I am not pugilistic, and partly because I know him not. But whatever fate he deserves, I feel his plan should not escape the criticisms it so strongly merits.

There is one point of his Utopian scheme with which I particularly desire to deal. Others, no doubt, will comment on the easy way in which nearly every remaining tradition is swept aside, or the delightful paragraph which in ten lines solves the whole financial problem, or the extraordinary conception of Guy's being run primarily for the benefit of staff and students and secondarily for the treatment of sick people—(Oh, yes, they might treat you at Guy's if you are the sort of case they want; otherwise you'll have to go somewhere else"), and so on.

For myself, I want to deal with reports; ordinary ward clerk reports. Concerning himself on the position of students, "Cosmos" smugly remarks that ". . . they will be at Guy's to be taught and not to perform the duties of porters and record keepers." Perhaps he did not (or does not) enjoy carrying patients and writing reports. I rather agree with him, both of them are laborious and tedious occupations. The former could easily be dispensed with as part of the curriculum, but the latter, to my mind, constitutes one of the most valuable parts of Guy's training, however tedious it may be at times.

To relieve the student of this degrading position he suggests that ". . . . reports should be the work of the house-officers with additions by the registrar. Under this system the reports might be worth the paper they consume." Now it is with no sense of criticism that I suggest that if we relied on the house-officer's reports to furnish information when old reports are turned up, we should generally have to be content with notes hurriedly written, and generally quite inadequate as a case history. The reason is obvious—the houseman has neither the time nor the inclination to perform the duties of the ward-clerk. In the majority of cases a fairly full and accurate report is written by the ward clerk, which is often a source of valuable information should the patient subsequently be readmitted. Again, the explanation is obvious; the ward clerk has the time and very often the inclination to keep a good and accurate record of his patients' progress.

Perhaps the houseman of the future will enjoy being allotted the task which is too degrading for the ward clerk to perform. But what of the student? He is allowed to write a report, which is handed back to him as not worth the paper it is written on. Apparently it would hardly be worth his while to preserve it for his own benefit.

I would draw the attention of "Cosmos" to conditions governing reports at the base hospitals. The official reports are written by a house-officer; as a case history and record of progress they are inadequate. Until a proper system of report-writing, as at Guy's, was instituted, very few of the clerks took the trouble to write reports, either for their own benefit or that of anybody else. As a result there was a great deal less interest taken in the cases. I found this very striking evidence of the value of reports, and especially of reports that were to have been seen and read by other people.

So I would say, whatever else may be changed in the flood of post-war reconstruction, let the reports remain the duty of the ward clerks. The system of writing reports on cases originated at Guy's, and is one of the numerous advances in medicine that Guy's has made. It has now become one of our traditions, and should not lightly be swept away. Even if the reports are not always "worth the paper they consume," well—we shall be able to waste a little paper after the war.

Yours, etc.,

M. C. CROSS.

Guy's Hospital,
S.E.1.

Appreciation

To the Editor of the GAZETTE

SIR,—We should like to avail ourselves of your columns to express our appreciation to Dr. Grasby, the medical superintendent of Pembury Hospital, for the part he played in arranging the details of the students recreation hut. Dr. Grasby is theoretically under no obligation at all to the students at Pembury, and we feel therefore doubly grateful to him for the work he put in to make us more comfortable.

Yours, etc.,

THE STUDENTS COMMITTEE.

County Hospital,
Pembury, Kent.

Rugby Football Club Centenary

To the Editor of the GAZETTE

SIR,—At the last meeting of the Rugby Football Club, it was decided to prepare for the celebration of the Centenary of the Club, 1843-1943. The occasion will be unique in the annals of Rugby Football, because this will be the first centenary of any Rugby Football Club in existence.

In connection with the celebrations it has been decided to publish a book on the History of the Club, and although two years may seem far ahead, it is a comparatively short time when collecting material to make the volume as complete as possible.

We have been most fortunate in obtaining the services of Dr. Alfred Allport as Editor, whose fame is known throughout the sporting world, and his excellent article in the Bicentenary number of the *Gazette*, 1925, is convincing proof that no better choice could be made, and we are grateful to him for accepting.

To all Guy's Rugger players and anybody else who has been connected with the Club at any time in its long history we appeal for any information which might be of interest, however unimportant it may seem to the sender. The Editor will attend to the arrangement.

The Club was established in 1843, but any further information on its earliest days would be welcomed. At the moment the following material is wanted: Reminiscencies; Personalities met in the game; Representative matches played in any country, county, touring sides and trials; Blues and colours awarded, other sports excelled in; and above all, Old fixture cards; Newspaper cuttings; Photographs; and, lastly, the Minutes books. As regards the latter, we can only trace 1881-1905 and 1933-to date. We know that Minute books existed before 1881, and between 1905 and 1933, and if anybody could supply them we should be grateful.

Dr. Allport will be assisted by Mr. George Winston, the Wills Librarian, who has kindly consented to act as Secretary for the collection of material, and to whom communications should be sent.

Yours, etc.,
R. U. KYNASTON,
Captain, 1940-41.
M. R. MULLINS,
Captain, 1941-42.
D. N. STRATHIE,
Hon. Secretary, 1941-42.
A. G. ALBERS,
Vice-Captain, 1940-41.

Guy's Hospital,
S.E.1.

"Guild of Ex-Patients"

To the Editor of the GAZETTE

SIR,—At a meeting of the Committee of the Guild of Ex-Patients held last Thursday, a hearty vote of thanks was extended to the Editors of the *Gazette* and to all Guy's students who assisted in saving the records of the Guild from damage by fire caused through enemy action.

May I at the same time express my appreciation of this timely action—it would be no small matter to have lost the records of some 8000 names and addresses of subscribers.

Yours, etc.,
T. SIDNEY,
Hon. Secretary,
Guild of Ex-Patients.

Guy's Hospital,
S.E.1.

"Guy's Letter"

To the Editor of the GAZETTE

SIR,—I hesitate to take up your space with what may appear to be trifles, but cannot without protest allow the writer of "Guy's Letter" in your current issue to misquote Gilbert, for whose works I have some reverence. The two lines mentioned should read as four, and come from two different verses of the song (or Bab Ballad). "When everybody's somebody" should be: "When everyone is somebodee." Also, "Barataria" is incorrectly spelt.

A pity to make five mistakes in such an apt reference, and I submit that accuracy in matters of art and letters is as desirable as in science and medicine.

Yours, etc.,
NORMAN A. PUNT.

Guy's Hospital,
S.E.1.

Sport and Hospital Information, etc.

Rugby

Guy's v. An Army XV

(At Honor Oak Park on Saturday, March 22nd)

THE last match on Guy's fixture list against an Army XV provided a fitting climax to a most successful season. A hard and interesting struggle, full of incident, ending in a win for Guy's in the very last second.

We are very pleased with the way things have gone, having had twenty-two very enjoyable games not one of which has been interrupted through the threatened "blitz." Kynaston has proved himself an admirable Captain, ably supported by Mullins, who has led the pack so efficiently.

I shall not comment on the personnel of the team as this will be dealt with when the statistics are published, but I can assure readers there is a grand spirit permeating through the Guy's side, and the players are determined to restore Guy's Rugby to its traditional and rightful place as one of the foremost clubs in the country, and to attain their object they have played themselves to a standstill whenever the odds have been against them.

The Army XV almost succeeded in walking

off with the spoils of victory. Guy's would have been very unlucky to have lost, as they had more of the play, and pressed continuously in the second half. Several fine passing movements by Guy's ended with Charlton, who simply would not bring Camp into the game. Time after time the latter would be waiting for the ball only to be sold a beautiful dummy by his partner. Charlton has plenty of skill to cut through which could be used to greater advantage to his side if he would only pass. On the other hand, Kynaston was constantly trying to get Gartrell away, and early on, the latter had a nice run on the line before being forced into touch.

A scrum on the Guy's line looked dangerous, but the forwards relieved with a dribble. The Army were getting the ball from the scrums, but their outsides were well marked. One of Guy's "threes" fumbled the ball and Morland, the Army's scrum half, went over for an unconverted try.

Gartrell made a dazzling run along the touch line, he missed one tackle by checking his speed, and side-stepping another opponent, to run round to the posts for a try which brought rounds of applause. Kynaston made no mistake with the kick.

The Army took the lead when Davies, a burly forward, forced himself over for a try in the corner, by twisting and turning and shaking himself free from several tackles. No goal points were added. Half-time arriving with the Army leading 6—5.

Lee and Everall were prominent in a Guy's rush, and Swann tackled the full back in possession. Guy's had a beautiful three-quarter movement all along the line, but Gartrell was forced into touch. Gartrell came inside to take a pass from Strathie, and a score looked certain, but Charlton held on and was tackled, Mullins picked up but his pass was fumbled. Gartrell made another opening for Charlton and again a chance went begging.

Matthews appeared to have the line at his mercy, but doubted whether he could get through, and passed to Gartrell, who was well marked. The Army had been defending heroically and suddenly made a break-away, but Charlton relieved with a kick to touch. Lee took an excellent pass from Kynaston, and was making for the line when the whistle went for a forward pass. Bad luck.

Guy's continued to attack in the Army's 25, but all efforts to score were nullified by an excellent defence, then suddenly the ball came to Strathie, who side-stepped and dropped a goal with the very last kick of the match.

Score: Guy's, 1 goal, 1 drop goal (9 points); An Army XV, 2 tries (6 points).

Team.—T. L. T. Lewis; R. F. Camp, D. W. F. Charlton, R. U. F. Kynaston (Captain), P. C. Gartrell; D. M. Strathie, N. I. Scott; J. D. Everall, R. M. Sharpe, A. B. Lee, A. G. Albers, J. R. C. Matthews; M. R. Mullins, T. W. Renton, G. F. Swann.

INTER-HOSPITALS SEVEN-A-SIDE TOURNAMENT

(Played at Richmond Athletic Ground on Saturday, April 5th)

THERE have been many memorable scenes on the Athletic Ground at Richmond, but surely not for years have we witnessed such a demonstration of jubilation as on this occasion, when Middlesex Hospital outplayed, outmanœuvred and thoroughly defeated St. Mary's Hospital to the tune of 19 points to nil in the Final.

The large crowd present must have been totally unprepared for such a wonderful exhibition on the part of Middlesex, although several were of the opinion that they would put up a good fight. They retired as gladiators, gallant and popular winners over a formidable foe.

There were indescribable scenes as the final whistle blew. Hats were flung in the air, the crowd dashed on to the field, hoisted the victors on their shoulders and carried them in triumph from the arena to receive their well-earned tankards.

The arrangements were excellent, and I am sure Mr. Harry Millett must have put in a lot of hard work to have made it so successful.

In the top half of the draw Guy's had a bye to the second round where they defeated St. Georges by 24 points to nil, the highest score of the series. Tries were scored by Gartrell, 4; Strathie and Mullins one each, whilst Mullins kicked 3 goals. They had the ball from most of the scrums, their movements were swift and the passing accurate, which raised great hopes of reaching the final.

Middlesex had beaten Westminster in the first round, and London in the second, but in these two games they were far from convincing.

The semi-final between Middlesex and Guy's was considered a very open affair, but Guy's were compelled to admit defeat by 8 points to nil. Steeds of Middlesex was the key man, he obtained the ball from practically every scrum, and this enabled Warner to make good use of his backs. Hinde scored for Middlesex in the corner, and then Mullins with a grand penalty kick hit the crossbar and actually dislodged it, with the ball coming back into play. If this had gone over the result might easily have been different. Swanson made the issue safe with a good try, which Almond converted. Guy's were unable to use their backs as the ball seldom came their way. The Middlesex tactics worked to plan.

Guy's team in both games: P. C. Gartrell, T. L. T. Lewis, D. M. Strathie, N. I. Scott, J. Breen-Turner, R. M. Sharpe, M. R. Mullins (captain).

In the second half of the draw, St. Mary's had a walk-over to the second round, where they beat St. Thomas's and entered the semi-final.

"Barts" beat Charing Cross in the first round, only to say good-bye when King's beat them in the second round. St. Mary's were compelled to fight hard to beat Kings' in the semi-final.

The final between Middlesex and St. Mary's was a thriller, and ended as stated.

RESULTS

First Round

Middlesex	11	Westminster	0
Charing Cross	0	St. Bart's	19
St. Mary's	walk over	U. C. H. scratched	

Second Round

Guy's	24	St. Georges	0
London	0	Middlesex	9
St. Thomas's	7	St. Mary's	15
King's	9	St. Bart's	3

Semi-Finals

Middlesex	8	Guy's	0
St. Mary's	10	King's	3

Final

Middlesex	19	St. Mary's	0

THE MIDDLESEX COUNTY SEVEN-A-SIDE COMPETITION

(Played at the Athletic Ground, Richmond, on Saturday, April 26th)

FOR the first time for many years Guy's entered a side for the Middlesex sevens. They were in the lower half of the draw, having been granted an exemption to the fourth round. The first match was against O.C.T.U. Sandhurst, last season's runners-up, and after a hard struggle the score was three all at full-time. Guy's scored a try during extra time which gave them the game, but Sandhurst lost a man, who retired through injury.

The fifth round game against Rosslyn Park was also close, Guy's winning by a goal to a try. In the semi-final, Cambridge University, the eventual winners, proved themselves the best side in the competition, and Guy's were defeated by 14 points to nil.

It was very unfortunate for Guy's that P. C. Gartrell could not play. Guy's team throughout was T. L. T. Lewis, R. F. Camp, D. M. Strathie, N. I. Scott, M. R. Mullins (captain), R. M. Sharpe, J. Breen-Turner.

In addition to the Middlesex competition, Guy's entered two sides in the Old Mid-Whitgiftians seven-a-side competition on the same day, one from Guy's and another from Tunbridge Wells. The Guy's VII reached the last eight and the Tunbridge Wells VII the semi-final.

Notice

THE SOCIETY OF APOTHECARIES OF LONDON

Examinations for June are as follows :—

Surgery.—June 9th, 11th, 12th.

Medicine, Pathology and Forensic Medicine.—June 16th, 18th, 19th.

Midwifery.—June 17th, 18th, 19th, 20th.

Changes of Address

H. St. John Rumsey, M.A., Rotherfield Greys, New Milton, Hants.

T. Murray Robertson, Surgeon-Lieut.-Commander, R.N.V.R., H.M.S. "Phœbe," c/o P.O., London.

John Henry Wildman, M.R.C.S., L.R.C.P., Royal Hampshire County Hospital, Winchester, Hants.

Appointments

Major-General H. P. W. Barrow, C.B., C.M.G., D.S.O., late R.A.M.C., appointed Colonel-Commandant Royal Army Medical Corps.

Deaths

OLIVER.—At Sea, in March, whilst serving in H.M.S. "Bonaventure," John Widdicombe Oliver, Surgeon-Lieut.-Commander, R.N., aged 33.

Eds. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry

and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV 31*st May* 1941 *Number* 1379

PASSIM

THE renewed lull in aerial activity, whether a gift from the gods, a deep laid plan of the enemy or simply the one happy result of the cold and dismal advent of Spring weather, has enabled a further stocktaking to be taken both of the methods and also of the results of treatment of air-raid casualties. A welcome improvement whose effects were already noticeable during the last blitz has been an improved distribution of the cases from any incident or group of incidents to the available hospitals in the area ; there is good reason to believe that the disastrous filling up of one hospital far beyond the limits of its beds or the powers of endurance of its surgeons whilst others nearby were left idle will not occur again. The necessary employment of Guy's itself as a casualty clearing station has given all here a surfeit of experience of the primary treatment of casualties, both medical and surgical. In many ways, however, it is mentally dissatisfying to treat and operate upon cases who next day are borne away in a green ambulance into someone else's care. The Base hospitals are more fortunate in this respect than is Guy's, for not only do they have their own local acute cases to deal with, but also they have the pleasure of watching and treating both their own and their evacuated cases until hospital attention is no longer necessary. This process admittedly may be a lengthy one, and at times appear almost dull, but the healing of wounds and the restoration of function to injured limbs in persons who apart from their injury were previously healthy, presents not only an instructive, but also one of the most satisfying aspects of surgery. These cases have, moreover, provided a valuable opportunity of demonstrating to our students both the uses and the limitations of physiotherapeutics. The realms of physical medicine are, of course, by no means limited to the after-treatment of traumatic surgery ; physiotherapy is a valuable therepeutic agent in many branches of medicine, but its methods have never been included as part of the compulsory curriculum : this has been remedied to some extent by the introduction of lectures dealing with this subject, but its true significance can only be gathered by practical observation of the methods employed and of the results that can be obtained.

In a realm so obviously open to quackery, and with lamps proffered to the public, to provide every conceivable sort of ray in every home, by the enterprising manufacturer, the conscientious general practitioner often finds it difficult to advise his patients upon the use of such machines that they have already bought. This is the more unfortunate for the fact that the methods of physiotherapy properly applied will relieve symptomatically and often therapeutically many of the common ills of general practice. There are, of course, recognised societies, to whose members patients may be sent for reliable treatment, in much the same way as the house officer will write " radiant heat and massage " on the bed letter, but although detailed knowledge of the subject need only be acquired by those dealing with specialised realms of surgery and of medicine, there is still scope for a better grounding for the medical student in this subject. The third aspect of the treatment of air-raid casualties is the one that is giving rise to most discussion to-day : this is the rehabilitation of the patient, and must include not only the fullest possible restoration of function to the injured tissues or limb, but also economic rehabilitation, or the return of the patient either to his original job or, if he is incapable of this, training for or absorption into some other employment in a wage-earning capacity. Physical rehabilitation will have already commenced during the later stages of the healing of the wounds and depends both upon encouragement and active co-operation of the patient as well as upon physiotherapy; following discharge from hospital, these processes should ideally be continued, preferably at a rehabilitation centre, or by some scheme under which physiotherapy, occupational therapy and technical training could be combined. This is a matter with which the medical profession can and will provide the most valuable assistance: economic rehabilitation is a matter which rests apparently with local employment boards very largely still, but it is a pressing matter which must be accepted as a national charge and which should, therefore, preferably be under the direct control of a Ministry.

A certain proportion of air-raid casualties will, through physical defect, never be able again to return to their heavy work, although perfectly capable of light duties; the individual, however, finds it difficult to secure such employment suitable to his capacities, he is left with the prospect of securing each week a certificate to the effect that he is "incapable of work," which is by no means strictly true in itself, and of living upon an allowance under the Personal Injuries Act, which is grossly inadequate in comparison with his previous wage-earning capacity. The capability of large organisations and of private employers to absorb such of their employees as fall into these categories is strictly limited, especially now that the recruitment of women into industry has been so widely organised. The Ministry of Pensions, it has been announced, proposes to take steps to secure the early employment of men discharged from the Services, and it would seem very desirable that their measures should be extended to include equally the victims of enemy air-raids.

▭

Professor Ryle has been appointed a Consultant Advisor in Medicine in the E.M.S., and will work also on behalf of the Shock and Wounds Committees of the Medical Research Council. His new duties will necessitate frequent absence from the Hospital, but Guy's will remain his headquarters and he hopes to continue teaching rounds as occasion allows. From all those who have already benefited from his outstanding teaching will come sincere regret that it no longer continues in its former abundance.

▭

Miss A. C. Robins, matron of the Bristol General Hospital, has been awarded the O.B.E. for devotion to duty during an incident in which the hospital was hit by high explosive and incendiary bombs. In extending our congratulations to her, we should like to remember also the high standards set by all of our Nurses since last September.

South African Aid for Guy's and the 'Boro

For two generations and more there has been a very close and friendly association between Guy's and South Africa. It will therefore come as no surprise to Gazette readers, alike in the northern and the southern hemisphere, to learn that the most generous help from the latter has been forthcoming for the hospital in its present distress and thereby for the stricken families in the battered streets of the poor old Borough. From these families, whose sickness and injuries are our concern at all times, now come our casualties on air-raid nights. It is our hope that we shall never fail them in their need and, as they are old friends of ours, it is a real cause for gratification when, in addition to hospital care, we can give them tangible help of other kinds. This the various organisations in South Africa are helping us to do. One of the most urgent needs when one's home has been destroyed is the replacement of lost or damaged clothing. From Cape Town, under the auspices of Britain's Babies' Fund, with Mrs. E. R. Scully as organiser, we have already received no less than eighteen bales of clothing for victims of all ages and both sexes. Additional bales have been received from the South African Red Cross Society through Mrs. Stuart Sichel and from the South African Voluntary Services, Trafalgar House. The garments are always sent in beautiful condition and packed with great care. The sizes of suits are given so that their distribution is made easy from the moment of unpacking. Of the bales received twelve have been distributed through Sister Harrison to the Homeless Centres in the immediate neighbourhood of the hospital and the remainder have been used for air-raid casualties admitted to Guy's or for members of the daily domestic staff of the hospital whose homes have been bombed and who have lost all their belongings. We only wish that all the kind workers on the committees in Cape Town and elsewhere could see and hear the appreciation of those to whom the clothes have come as a blessing out of the blue and at a moment when life must often seem very shorn of hope and comfort. Recent raids have hit our area hard and the small reserve of clothing which we had begun to accumulate was soon exhausted. So, although we say "Thank you" with all our hearts to all our Guy's and other South African friends, we must perforce also say to them, "Please go on sending more."

Cervical Rib and Brachial Plexus Lesions

A Clinical Lecture by Nils L. Eckhoff, Esq., M.S., F.R.C.S.

Before discussing the special signs and symptoms associated with cervical ribs I must dwell for a few moments on the anatomy of the brachial plexus, an understanding of which most students leave behind them in the dissecting room, and try to recapture in great haste before the final examination. It is much wiser to keep anatomy alive during the whole clinical period, for the main structure of surgery is based on it. Lesions of the brachial plexus or its parts are not at all uncommon in injuries of transport, warfare and air raids, and localising the lesion is a most interesting exercise. These cases appear in great numbers at the examinations, and at the recent B.S. we had instances of cervical rib with nerve lesion, radial, median and ulnar lesions, plexus injuries and cases of syringomyelia with lesions of the brachial nerves.

The Brachial plexus is made up of the anterior primary divisions of the following nerves: Cervical 5, 6, 7 and 8 and Thoracic 1, with contributions from cervical 4 and thoracic 2. C. 5 and 6 join together to form the upper trunk, C. 7 forms the middle trunk, and C. 8 and T. 1 join to form the lower trunk. Each trunk divides into anterior and posterior divisions. All the posterior divisions join together to form the posterior cord. Anterior divisions of C. 5, 6 and 7 join together to form the lateral cord, and anterior divisions of C. 8 and T. 1 join together to form the medial cord. The trunks are related to the third part of the subclavian artery, particularly the lower trunk which is covered by the artery, and the cords lie disposed around the first part of the axillary artery.

The lateral cord divides into the musculocutaneous nerve and the lateral head of the median nerve, the posterior cord divides into radial and circumflex nerves, and the medial cord divides into medial head of the median, and the ulnar nerve. In addition, certain important branches come off from the roots, trunks, cords and nerves, as follows:

Roots.	N. to scalenes and longus colli.		
	N. to rhomboids.		C. 5.
	N. to serratus anterior (long thoracic).		C. 5, 6 and 7.
Trunks.	N. to subclavius.		C. 5 and 6.
	Suprascapular nerve.		C. 5 and 6.
Cords.	Lateral pectoral, from lateral cord.		C. 5, 6 and 7.
	Subscapular, upper and lower.	posterior cord.	C. 5 and 6.
	N.to latissimus dorsi(thoraco dorsal)		C. 6, 7 and 8.
	Medial pectoral	from medial cord.	C. 8 and T.1.
	Medial cutaneous nerve of arm		T. 1.
	Medial cutaneous nerve of forearm)		C.8 and T.1.

With this picture before us it is possible to comprehend any lesion of the plexus. The principal lesions are as follows:

Erb's paralysis. This is a birth injury, due to damage at the point where C. 5 and 6 join together, and where the suprascapular nerve and the nerve to the subclavius are given off (Erb's Point). It is characterised by paralusis of the following muscles supplied below this point: Deltoid, supraspinatus, infraspinatus (abductors and lateral rotators of the shoulder) biceps, brachialis and brachioradialis (mainly flexors of the elbow), and weakness of teres major, pectoralis major, latissimus dorsi and subscapularis (adductors and medial rotators of the shoulder) and slight involvement of pronator teres, supinator, flexors of wrist and thenar muscles. In consequence of this the arm hangs by the side in medial rotation, with the forearm pronated and the fingers and wrist flexed, (porter's tip hand). There may be sensory loss if such an injury occurs in adults.

Klumpke's paralysis. This is also a birth injury, affecting the lower part of the plexus, C. 8 and T. 1. In this condition one finds paralysis of the intrinsic muscles of the hand and flexors of the digits. There is anæsthesia along the medial side of the forearm, hand and little finger, and claw-hand results.

Whole plexus lesions. These usually follow injuries, such as being thrown against a windscreen or more commonly off a motor-cycle, where the shoulder is distracted from the neck. I have come across two such cases recently.

A young woman was pinned for some hours in the collapse of a house, a beam lying across her arm above the elbow. She had a dislocated shoulder, a large skin loss above the elbow on the medial side, going down to the deep fascia and chipping the medial epicondyle of the humerus. She had apparently total palsy of the arm, with no anæsthesia except in the ulnar area, and it was important to decide whether her lesion was at the site of the damage on the medial side of the arm, due to pressure on the neurovascular bundle, at the shoulder joint, or higher in the neck. On careful examination it was clear that the spinati were paralysed. This clearly put the lesion at or above Erb's point, where the suprascapular nerve comes off the upper trunk. The fact that she had only partial anæsthesia suggests that the lesion was not complete.

A Norwegian sea captain was similarly pinned by a falling baulk of timber when his little ship was bombed. He had virtually the same lesion, except that he had no anæsthesia.

These are fairly typical of partial plexus lesions, but a complete lesion shows in addition complete anæsthesia of the hand, forearm, and part of the arm. Where the first nerve has been torn close to its origin from the cord the sympathetic fibres running in this nerve, destined to go to the stellate ganglion and so to the eye, are damaged, producing Horner's syndrome, which is recognised by ptosis, enophthalmos, a small pupil and lowered tension in the globe of the eye, and absence of sweating on that side of the face. The presence of Horner's syndrome indicates a bad prognosis. In the same way lesions of the fifth and sixth nerves near the cord will produce, in addition to the Erb's type of palsy, paralysis of rhomboids and the serratus anterior, and here also the prognosis is bad.

Lesions of the lateral cord are distinguished from Erb's palsy by no involvement of the shoulder muscles or brachioradialis, but complete palsy of pronator teres and radial flexors of the wrist, whilst lesions of the medial cord are distinguished from Klumpke's palsy by additional paralysis of flexor carpi ulnaris.

I will not dwell long on lesions of individual nerves of the plexus, for these should be well known to you, but would like to remind you that a radial lesion is shown by wrist drop from paralysis of the extensors of the forearm and fingers, and a small area of anæsthesia on the back of the first interosseous space; an ulnar lesion by paralysis of the adductor pollicis, interossei, medial two lumbricals, hypothenar muscles and possibly flexor carpi ulnaris and part of profundus digitorum, with anæsthesia of the front and backs of the little finger and half the ring finger; whilst a median lesion is recognised by paralysis of the three thenar muscles, the lateral two lumbricals and distressing anæsthesia of the last joint of the thumb, index and medius, back and front, and less marked anæsthesia of the palm and the palmar surface of the thumb, index, medius and half the ring finger. If the lesion is above the elbow the flexor group of muscles of the foreaem will also be paralysed.

A lesion of the nerve to the serratus anterior (long thoracic nerve of Bell) from neuritis or injury at breast operations, is recognised by winging of the scapula when the arm is held forwards, and inability to abduct the arm above a right angle, from loss of power of rotation of the scapula.

Cervical rib. We are now in a position to study the special anatomy of cervical rib. The rib is an extra rib, articulating with the seventh cervical transverse process. It may be a short stump connected with the first rib by a band of fibrous tissue, or it may be a rib of considerable dimensions articulating by a diarthrodial joint with the first rib, just lateral to the scalene tubercle. This has been the arrangement in the last three cases operated upon by me. Whatever the exact arrangement, the first nerve has a longer course to pursue on its way to the plexus, and runs a considerable risk of pressure upon its fibres. Symptoms of this pressure usually come on in women between 20 and 30, " widows who take in washing," and it is suggested that this is due to dropping of the shoulders, which stretches the nerve even more sharply over the rib. These symptoms and signs are characteristic, and are well exemplified by this case seen at Out-Patients last week.

Mrs. B., aged 36, had a fall a week before attending hospital and noticed some weakness of the grip after this. On examination there was marked wasting of the muscles of the thenar eminence, giving her an ape-like hand. Abduction and opposition of the thumb were absent. There was also wasting of the interossei, and abduction and adduction of the fingers was diminished and weak. There was some wasting of the forearm muscles, and flexion of the fingers was weak; hence her poor grip. No definite zone of anæsthesia was found, but on questioning she admitted to numbness and tingling along the ulnar border of her forearm and hand, which she had had for so long she almost regarded it as normal. These signs are a clear indication of pressure on the medial cord of the plexus, and a search soon revealed the cause, for in the neck a hard lump could be felt in the posterior triangle (on both sides) pushing the subclavian artery forwards. X-ray confirmed the presence of bilateral cervical ribs, and electrical testing reavealed a weak normal reaction in the muscles of the forearm and the interossei and lumbricals, but complete degeneration in the three muscles of the thenar eminence.

It is therefore clear that she must have had pressure for some time, and the recent injury was incidental. She had no vascular symptoms.

In another group of patients vascular symptoms occur, and it is interesting that nervous and vascular symptoms rarely occur in the same patient, and that vascular symptoms are much less common than nervous symptoms. I have had the opportunity of operating upon two such cases recently, and these were described in detail by Holling in the Guy's Hospital Reports. The case records are as follows:

Mrs. L. C., aged 38, housewife. First seen December, 1937. Since 1933 she had attacks of numbness of the fingers and toes on exposure to cold. For three months the condition had been worse, and suddenly one month before the little finger of the right hand had become black and painful, and had since been either white or blue.

On examination the little finger was blue, and the other fingers of the right hand were redder than normal. No paresis or anæsthesia. In the neck a hard lump was thrusting the subclavian artery forwards. X-ray showed a large cervical rib articulating with the first rib on the right and a large seventh transverse process on the left. Axillary, brachial and radial pulses could be felt easily, with the arms by the side, but with the arms abducted to 90° the brachial and radial pulses disappeared. Oscillometer readings were absent in this position.

In a room at 14° C. Raynaud's phenomenon came on in 10 minutes. Reflex vasodilatation was good except for the right little finger, and the blood flow in full vasodilatation was 65 per cent. of that in the other arm, indicating thrombosis of vessels. At operation the rib ended in a boss, articulating with the first rib, but it did not appear as though the artery or plexus was stretched over the rib. On raising the arm, however, the artery appeared to be nipped between the boss on the rib and the clavicle, and the radial pulse became weaker. The front portion of the rib was removed, and the alteration of the radial pulse no longer occurred in any position of the arm. The artery was dilated beyond the point of pressure.

Twelve days after operation vasodilatation test showed considerable improvement, and seven months later a normal result. Unfortunately two years later further interference with the arteries of the right arm appeared, and now the radial pulse was weaker, and all tests showed diminished blood flow in the forearm and hand. Dr. Grant asked me to explore the neck again, which I did but could find no local cause to explain this misfortune. It must be assumed that further thrombosis had occurred in the vessels of the arm. I saw her a week ago, and now the radial pulse has disappeared, and the recent cold spell (she thought it her duty to take on the job of railway porter) has reproduced all her symptoms in exaggerated form.

Mrs. M. B., aged 36, housewife. Seen in February, 1938. For a year she had had pain and numbness in the right hand. The little finger first became swollen, then the index finger began to go white and dead in attacks, and pain occurred during recovery. She was better in the summer, but in the colder weather all her fingers showed Raynaud's phenomenon. She had pain in the muscles of the forearm on use of the hand. Two weeks before, the thumb became black and intensely painful, and her doctor noticed no pulsation in the arteries of the arm. X-rays showed a right cervical rib, articulating with the first rib. There was no paresis or anæsthesia.

The fingers of the hand were redder than normal, and the tip of the thumb was gangrenous. In a room at 12° C. the fingers became cyanosed, while the other hand was normal. No reflex vasodilatation occurred, and the cyanosis persisted on putting the hand into warm water. No flushing could be produced in the hand by the reactive hyperæmia test, and no oscillometric readings could be obtained on the right side, and the blood flow at maximal dilatation was about one-tenth of normal. Pulsation could be felt in the axillary artery with the arm by the side, but no pulsation in any artery when the arm was elevated to a right angle.

At operation the transverse cervical and transverse scapular arteries were larger than normal, and the subclavian artery was pushed forward and flattened by a boss at the front end of the cervical rib, where it articulated with the first rib. As in the other case it was found that the artery was nipped between the boss and the clavicle when the arm was elevated, and the axillary pulse was obliterated. When the rib was removed, a fusiform dilatation could be seen on the artery beyond the point of pressure, but no thrombosis could be felt in it.

After operation the axillary pulse was felt in all positions, but it took five weeks for the gangrenous end to separate. Seven months later the thumb was well healed and there was no more pain, but when her hands were in cold water the fingers would go white and dead, but caused no inconvenience. Oscillometric readings could now be obtained, the hand remained warm in a room at 17° C., and the reactive hyperæmia test gave a delayed response.

It has been suggested by Telford that vasomotor symptoms are due to irritation of sympathetic fibres running to the arm in the first nerve, causing vasospasm. But there is evidence that these fibres do not necessarily occupy the lowermost position in the nerve, and as mentioned previously, other nerve symptoms are rare in cases with vascular symptoms. Furthermore, continued irritation would be more likely to lead to sympathetic paralysis, and therefore vasodilatation.

Evidence of direct pressure on the artery (presumably intermittent) has been produced in my cases and in three described about the same time in the Brit. Jour. Surg. by Eden.

His findings are so closely related to my own that I shall use his beautiful illustrations to show you. The cervical rib, broadened at its anterior end into something resembling the tip of a clubbed finger articulates with the first rib about the position of the groove for the subclacian artery. The artery is stretched over this, and immediately beyond this point there is an aneurysmal dilatation. The cause of this aneurysmal dilatation is a little difficult to understand, unless it be that the intermittent obstruction, which they also found when the arm was raised, has produced it.

Clotting appears to occur in the dilatation and portions of the clot are swept on to occlude the smaller arteries. Symonds (personal communication has told me of cases where the clotting, spreading backwards to the innominate, has caused cerebral embolism *via* the carotid artery.

I do not wish you to think that vascular symptoms are common with cervical rib, but I happen to have been interested in them. Nervous symptoms are more common, as I have told you. But it is important to advise removal of the rib if either of these groups of symptoms arise, for they are progressive, and by the one painful phenomena leading to gangrene may occur, and by the other paralysis of the small muscles of the hand, which are so very important to all who work.

Finally, in a small number of people, nervous symptoms are produced in the absence of a cervical rib. In such there is probably a postfixed plexus. Some relief can be obtained by dividing the scalenus anterior near its insertion which allows the artery and nerves to move further forwards. Scalenotomy is sometimes added to the standard operation for removal of cervical rib.

REFERENCES

Eden, K. C. (1939), Brit. Journ. Surg. **27,** 111.
Holling, H. E. (1939), Guy's Hosp. Rep. **89,** 285.

Sector News

Guy's Letter

THE air-raids seem to have made little difference to the number of civil cases either at Out-patients or in the wards, and the clinical material available is really rather bountiful.

We have to speak of changes of address, of visiting cards and " How-do-you-do ? "

Guy's will shortly not lose but, as it were, loan Professor Ryle to the E.M.S. as Consultant Adviser. He will, nevertheless, still make the hospital his headquarters, and, perhaps, be able occasionally to go round. Professor Ryle leaves with the good wishes of everyone but under suspicion—suspicion which is the hope that as he left Guy's for Cambridge and came back, so he will leave for the E.M.S. and again return.

Another has left us, too. The old Canadian, the Eternal House Physician, God's gift to England, has left for Orpintgon. We shall miss Mr. Bernard Leibel greatly, and shall not again find such a butt to keep our meal-time conversation flowing. We say good-bye to Mr. Leibel and hope he will enjoy his sojourn at Orpington.

Mr. Glover, not long away, has now come back with Mr. Hawkins, of Orpington. The latter has just obtained the Diploma in Anæsthetics, and we congratulate him, Mr. Kynaston, Mr. Hallam, Mr. Martin and Mr. Stead, who have obtained part of the M.B., on their successes.

We now have at the hospital three anæsthetists, and this may be of great importance on an air-raid night. We should expect to see a great change in Mr. Shein, for, it is said, he has expressed an intention to re-organise the anæsthetics in a way similar to the surgery. As is known, there is a surgical O.C., who sees the cases, makes out the operating lists for the appropriate surgeons and does a great deal else besides. Mr. Shein is now to appear in a new and parallel role. He is buying a black suit and striped trousers with gold watch-chain to match, surgical boots to increase his height and add " presence," is practising a carrying-voice production in the corridors of Nuffield House and is rehearsing entrances and exits through the curtain at the end of the Resuscitation Ward. In this way, it is believed Mr. Shein will become the exact counterpart of his opposite number. A second blackboard, for the anæsthetic lists, will be set up at the end of the Ward, and this, by day, will increase Sister Harrison's news bulletins about the number of patients in her "This is not a passage but a ward."

As a result of their recently having had to get several patients to and from the theatres the house surgeons and anæsthetists are to be issued with peaked caps and red striped trousers.

R. T. H.

Farnborough Letter

THE difficulty of composing a letter naturally varies inversely with the amount of news which is available as raw material. This week the local supply of this commodity is at a very low ebb, for, during the last fortnight, life in these parts has kept a very noiseless tenor, no aerial incursions or internal upheavals having occurred to break in upon our rustic quietness. The tennis-courts are coming back into their own, and the Hospital cricket team has played its first match on the village green. The swans on Keston lake have produced three charming cygnets; the bluebells hang like a purple mist in the woodland glades; and Mr. Spalding has decided after much deliberation that the weather is now sufficiently vernal to justify the planting-out of his tomatoes. The flower-bed in front of the Midder Block is a riot of colour; we are having some welcome rain; and everything in the local garden is lovely. Of course, one can find a grouse if one really looks hard enough. For example, the staff of Bromley are growing a little weary of working all day in a ward with blackened windows, which not only keep out every ray of light, but also, if we remember our physics correctly, encourage the absorption of heat. However, where possible, full advantage is being taken of the warmer weather to air the patients in the open in the daytime. The children, particularly, are enjoying many hours a day among the apple-blossom in the orchard which adjoins their block.

There has also been some blossoming-out in the academic world, and we have pleasure in recording the success achieved by Mr. Rushforth in the recent final examination for the F.R.C.S. He has thus maintained the 100 per cent. pass standard which has been set by the Farnborough candidates during the last twelve months.

V. C.

Pembury Letter

FOR some weeks past Dr. Navasquez has been visiting Pembury to give pathology classes. We feel sure that his action is greatly appreciated by the students, and also no doubt by the select few who gather daily at the "Blue Boys." It is surely a good thing that teachers should not limit their activities solely to the hospital on which they are based.

A short time ago a man, who lives in Tunbridge Wells, found himself in Cape Town. One day when he was walking on the slopes of Table Mountain, he encountered a British soldier looking for a tea-shop. As *cafes* on Table Mountain are about as common as they are in the Jarrabub oasis, our friend invited the soldier back to an hotel in Cape Town. Subsequent conversation revealed that they were both familiar with Tunbridge Wells; in fact, the soldier actually came from Pembury Hospital. He was none other than E. M. Poulton. It was very pleasant to get this news of our sometime colleague, and if in time he should happen to read these lines, we should like to send him our greetings.

N. M. J.

Orpington Letter

WE have spoken before of the impending departure of Hawkins, but this week the melancholy event has taken place. Hawkins has been with us for fourteen months in the capacity of Medical Officer and Assistant Anæsthetist, and in him we lose at once a man of great capability and a charming personality.

We extend our welcome to Bernard Leibel who has come to us from Guy's.

A new method of occupying spare moments has arisen in the Mess-trains. Mr. Hammond and his satellites have caused to be erected a large railroad which occupies three walls of our erstwhile peaceful sitting room, and the roar of locomotives (Gauge 0) is now heard together with the expletives of some of the staff when the former come off the rails—a not uncommon incident.

We are now less than ever disinclined to accept the rumour that Sister Marriott is going to present the Sisters with a doll's-house.

We ourselves, in a moment of playfulness sent an up train on a down line, only to be informed that it was bad form—as bad, in fact, as eating peas off a knife.

This week we had the pleasure of entertaining some members of the Massage Department at a dance in the mess. The first eight places in the recent final examination for the whole of England were obtained by members of this Department.

We sit at the moment a long way from the Operating Theatre, for Mr. Laurenson is busy there extracting an unexploded explosive bullet from the hand of a member of the R.A.F. We trust it will not go off.

B. D. J.

Correspondence

"A Plan for a Post-War Guy's"

To the Editor of the GAZETTE.

SIR,—I read with interest Mr. M. C. Cross' letter in the last issue of the *Gazette*, and I heartily agree with him about the question of Ward notes.

If it is to be the duty of the House Surgeon to write all the ward notes, how will he learn how to record notes correctly if he is not taught as a student? If the system of porterage is also to be taken from the curriculum of the student, how will the student learn how to deal with post-operative complications which occur on the way back to the ward, and how will he learn the correct way to lift and transport patients?

No, let Guy's stay as it is—a training school for practical doctors. Do not let it become too academic as some other training schools are, where students write notes which are never preserved.

Yours, etc.,

JOHN GORDON.

Royal West Sussex Hospital,
Chichester.

"Notes on the Growing Jaws"

To the Editor of the GAZETTE.

SIR,—In "Notes on the Growing Jaws" (G. H. G., May 3rd, 1941) it is stated that Brash has confirmed and amplified John Hunter's interpretations of the Madder experiments. It is true that these interpretations have been amplified, but to say that they have been confirmed is misleading. Brash may have reached the same conclusions as Hunter, and confirmed them in this manner, but he has not proved that either Hunter's or his own conclusions are correct.

The whole-hearted acceptance, by the majority of anatomists, of the interpretations of the appearance of the macerated maddered bones of the adolescent pig, as indicating the method by which bones grow, is one of the mysteries of modern science. It is not too much to say that, if madder feeding were introduced to-day as a new discovery, it would be subjected to a merciless and devastating criticism. Madder feeding is used on pigs of from four months onwards and may be criticised on two grounds :—(1) That it does not give any indication of the method of growth of the bones of the adolescent pig; in other words, that madder feeding does not indicate either accretion or absorption with any accuracy. (2) That it does not indicate the method of growth of the bones of the fœtal or young pig.

It should have been realised long ago that it is putting the cart before the horse to expect a study of adolescent bones to reveal the method by which these same bones grow. The obvious way is to trace the development of bones from the beginning and gradually build them up stage by stage until the complete skull is formed, instead of endeavouring to surmise from the almost complete edifice how the foundations were laid.

The modern teaching of the growth of the parietal may be used to illustrate the stupidity of the present position. Le Gros Clark ("The Tissues of the Body," 1939) says that the parietal expands by continual deposition of bone on its outer surface and a corresponding absorption from its inner surface; the former being seen to be in contact with rows of osteoblasts while the latter is being eroded by numerous multinucleated osteoclasts. This appears to be conclusive, but in actual fact is not. It is certainly not the picture seen in the parietal of the fœtal pig, which does not expand by a process of reformation. If the parietal of the adolescent pig expands by a process of reformation a remarkable change must take place in the method of growth, and there is no evidence that such a change takes place.

It is quite certain that modern teaching of the method by which bones grow is illogical and incorrect. There is no connection between the demonstrable facts as seen in the developing heads of fœtal pigs and the interpretations of the maddered bones of the adolescent pig. All the evidence so far examined shows that the head continues to grow during adolescence as it has done throughout fœtal life, and it must be concluded that there is something radically wrong with the madder experiments.

Yours, etc.,

S. WILSON CHARLES.

Devonia, Rickmansworth.

Guy's Hospital Gazette

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

A Trip to Egypt in War Time

By Colonel E. B. Dowsett, D.S.O., T.D., M.R.C.S., L.R.C.P., L.D.S.
(Consulting Dental Surgeon, Guy's Hospital)

HAVING been appointed by the Royal College of Surgeons to act as their official " Visitor ". to the Dental School of the Egyptian University at the request of their Faculty of Medicine, I left London on May 8th, 1940, to proceed to Egypt, with the object of inspecting and reporting upon the organisation and teaching in the Dental School of the Fuad El Awal University in Cairo, where I arrived in the early morning of May 18th.

Before leaving London, I visited the Egyptian Education Office in Westminster, where I was hospitably entertained and given much useful information. I also called upon the Egyptian Ambassador to the Court of St. James, who received me most cordially and granted me a " laisser-passer " for the Egyptian Customs, as well as a Diplomatic Visa for my passport.

The journey across was exceedingly pleasant and carried out in perfect weather. By good luck we just missed trouble at many places. After leaving London at 7 a.m. we were annoyed at first at the delay at Folkestone, where we were kept three hours before moving, but we learnt that they were " sweeping our crossing " for us. Also on arrival at Calais, we saw a spot where a huge piece of masonary had been blown away from the base of the lighthouse, by a mine washed up there early that morning. We stayed the night in Paris, where they had had three air raids the night before. We had a quiet night, but we heard on the wireless two days' later, that they had a bad raid the night we left. We passed through Lyons about 6.30 p.m., and about midnight that same night they had their first very bad raid on that city, including the railway station and many killed. We slept on board the s.s. *El Nil* in Marseilles harbour for one night, as they were still unloading cargo, and all was quiet, but the night we left there was a bad raid on Marseilles harbour and two ships were sunk.

The representative of the Agency with whom my passage was booked met the train at Paris, and there were only two other passengers travelling by the same agency. These were two young ladies to whom the representative introduced me when he took us all in the same taxi in the morning. In the evening on the train, I sat with them at dinner, and in course of conversation it transpired that one of them was coming out to Cairo to marry a Guy's man, now in the Army Dental Corps, whom I had helped both to teach and examine a few years ago. I attended their wedding later at the Garrison Church at Abassia. The other young lady was coming out to be a sister at one of the many hospitals in Cairo, and of which hospital, curiously enough, I had a report in my pocket—a double coincidence. Also on board was the Chief of Police in Palestine, who was actually in Jerusalmen for several months at the same time as myself during the last war, when he was in the R.E.—so we had much in common to talk over.

The sea journey was uneventful, except for one very rough day, when about three-quarters of the passengers remained in their cabins. We called at Genoa for a few hours and passed through the Straits of Messina late the next evening—a very pretty sight, especially on the mainland side with all the many lights. We had Reuter's wireless news every morning and the London broadcast news three times a day, and so did not feel cut off. The food was truly excellent and some of the stewards were dressed in most elaborate fully gold braided Egyptian costume. Since returning I have seen in the *Times* of the arrest, on our arrival in Alexandria, of the chief steward, a Hungarian, and the chief of personnel, an Italian, for attempted sabotage before we left Marseilles. The former was given six months' hard labour, and the latter committed suicide on the day of the trial. That steward waited on me during the whole voyage.

At Alexandria, Dr. Cyril Hall, the first Guy's man to obtain the B.D.S. Lond., and who is on the senior staff of the Dental School in Cairo, came on board to meet me when we had anchored in the harbour. He was most helpful with customs and formalities generally, but on landing it was too late to drive through to Cairo that night, so we stayed at the Cecil Hotel and started off by car at 4 a.m. next morning to cross the desert by the new road to Cairo. After going about 30 miles, however, we struck a bad Khamsin and most reluctantly had to turn back, as to drive through it would have been not only very detrimental to ourselves, but also would have ruined the car. So after breakfast back in the hotel again we started off across the Delta road, which was most interesting, but very hot with a shade temperature of 117 deg. F., but quite free from sand.

The University Examinations started the day I arrived, and those for the Dental Students went on from May 18th to 27th. The three senior members of the Dental Staff acted as internal examiners, and three external examiners were drawn from the Senior British Dental Officers in Egypt—two of whom were Guy's men, namely Col. Salsbury, O.C. Army Dental Corps, and Flt. Commander Kennedy, O.C. R.A.F. Dental Corps.

All the students in the Faculty of Medicine sit for their various examinations at the same period—some 800 students at one time—about 500 in a large hall, and the remaining 300 in a large temporary marquee. The first day of the examinations was the day of the Khamsin, as I said above, and was very trying for all candidates.

I independently marked all the papers, vivas, and practical examinations in all the dental subjects to make my comparisons with those of the examiners.

The rest of my work consisted of attending the Dental School daily and watching all the work and the teaching in the various departments and talking to all and sundry to gain information.

The teaching and examinations are all conducted in English, for when Egypt decided to have a large University of many Faculties, the authorities decided upon the English language for their use, on account of the great predominence of all the scientific and other literature in our language, having little or none of their own. The teaching of English was therefore made compulsory in all schools.

When this great University was created, many British professors were appointed, but more recently when Egypt was given its suzerainty with the accession of King Fuad I, it became a matter of Egypt for the Egyptians, and several of the contracts of these British professors were not renewed, and there are now but few left.

My voluminous report on my findings in the Dental School is, of course, confidential, and is in the hands of the College of Surgeons.

I received extreme kindness and courtesy, unbounded help and hospitality from all with whom I came in contact.

Whilst in Cairo, I called upon His Britannic Majesty's Ambassador, and had the honour of lunching with His Excellency and Lady Lampson at the Embassy.

I had several conversations with the Dean of the Faculty of Medicine—His Excellency Sir Ali Ibrahim Pasha, K.B.E., who was kind enough to introduce me personally to the Minister of Education, the Minister of Health, and the Rector of the University, from all of whom I received much kindness and hospitality.

Through the kindness of the Matron, the Sisters and some of the staff, I was shown over the King Farouk I Hospital, the King Fuad I Hospital, the Kasr-el-Aini Hospital and the Red Crescent Hospital. The size of these hospitals and the enormous amount of surgical and medical work accomplished further impressed upon me the extreme importance of the Dental School in Cairo.

The Matron of the Kasr-el-Aini and King Fuad Hospitals is Miss Parsons, late of Guy's nursing staff, who has been in Egypt now for 30 years. The out-patient Sister of the King Fuad Hospital is Miss White, also late of Guy's nursing staff. At this latter hospital, the number of out-patients attending *daily* varies from 5,000 to 7,000, and it is a sight worth seeing to watch them often fighting at the doors to get in, and with a policeman on each door to keep order.

At the invitation of the Dental Staff and Students, I was priviledged to lecture to them twice; I also had the priviledge of lecturing before the Odontological Society of Cairo—at which about sixty members attended; and at the invitation of Colonel Salsbury, I lectured to the officers of the Army Dental Corps in Egypt, including those of the R.A.F. and the New Zealand Forces.

In Egypt in 1921 a law was made prohibiting dental practice by unqualified persons, but those who were in practise at the time were able to register by passing a simple practical examination. I understand that a few failed to pass the required examination, and that 193 passed and were placed on the Register.

These practitioners are, of course, dying out, but as there appears to be no machinery for prosecuting those who practise dental surgery without being registered, there are, I understand, still a considerable number of unregistered persons in dental practice.

Nevertheless, there is plenty of scope for qualified dental surgeons, and much work to be done both in private practise and in the public dental service which is rapidly extending.

A few hospitals have dental surgeons attached on a part-time basis, and I understand others are being appointed.

There are 18 dental surgeons at present working at various dental centres for school children in Cairo and Alexandria. About 3,000 boys and girls from various schools in the vicinity attend at each centre, and full time as well as part time dental surgeons are appointed. These dental centres are for the Primary and Secondary School children whose ages range from 7 to 19 years. At present there are no dental clinics for the Elementary schools for the poor, but it is anticipated that these will be formed as finances allow.

The Chief Medical Officer under the Ministry of Education, was kind enough to take me round three of these clinics, and they were admirably equipped, well staffed, and the records well kept. As these clinics were only started at the end of 1938, much praise is due to the founder of the system.

The Dental School of the Fuad University in Cairo was established in 1927.

Entry to the Schools of the Faculty of Medicine is competitive, and is determined by the result of the Preliminary Scientific Examination of the University—thus the first 70 per cent. are admitted to the Medical School, the next 15 per cent. to the Dental School, and the remaining 15 per cent. to the School of Pharmacy.

At first the School was successful, but of recent years the number of students has diminished.

The School is very well planned and admirably equipped in every way.

There is considerably more work to be done than can be carried out by the students, so that a number of extra house-surgeons have to be employed.

There is a truly excellent dental museum, and it is little short of wonderful what has been collected in the time, and much credit is due to those responsible. From a teaching point of view it is excellent. There are seven demonstration Leitz microscopes with dual eye-pieces for demonstrator and student, and each one is arranged with a large number of slides fixed to a rotating cylinder with automatic control.

The amount of clinical material for the Dental School is practically unlimited and of infinite variety. The general populace who frequent the hospitals are not only extremely ignorant and living under the worst possible unhygienic conditions, but they are also tolerant of their affections to an amazing degree. So that one so very often sees dental, and jaw affections generally, in a most advanced stage. Perhaps the most striking of these is the extreme frequency and severity of osteo-myelitis of the mandible—there being generally several cases every morning in the out-patient department. On careful investigation I surmised this was due to one or more of the following three predisposing causes :—(1) the very advanced stage to which patients will often allow an alveolar abscess to progress before seeking treatment ; (2) the very unhygienic conditions under which the people live, and the dirty state of their mouths ; (3) previous attempts at extraction either by the patient himself or by some unauthorised person. I saw a few cases where the patient had made a self attempt with a pair of scissors. I satisfied myself that the condition was not due to any lack of care in the hospital treatment.

Another condition which I found comparatively common in Egypt, which is seldom if ever seen in this country is Hypoplasia of the deciduous teeth. This frequency must be due to entire lack of any ante-natal care, and the ill-nourishment and extreme poverty of so many mothers.

Ulcerative gingivitis (Vincent's Angina) too, is far more common than in this country, and on most days in the out-patient department, I was able to see several fresh cases. This frequency again is undoubtedly due to the very unhygienic conditions of the patients' homes.

On the social side, I was entertained right royally by many kind friends from the University, military and civil communities. Besides making many new friends, I found I knew several old ones in Cairo, and old and new alike were all lavish in their hospitality, and for the last four weeks, I do not remember dining alone.

Sightseeing, as such, did not concern me much, having spent several months in Egypt in 1918-19, but I did visit Sakara twice to see the recent, as well as some of the old excavations, and again through the kind offices of friends who personally conducted me.

I " crewed " for Dr. C. Hall in two sailing races on the Nile, and very interesting and, at times, exciting they were.

When I first started for Egypt, I " banked " of course upon Italy not coming into the war, but when on June 10th she definitely threw in her lot with Germany, and the Mediterranean was thereby closed to passenger traffic, I saw visions of great difficulty in getting home at all. I was not normally due to leave until June 25th, so there was a little time to think about it. At first it was thought that perhaps Imperial Airways, to avoid Italian territory, might make a route via Khartoum and then across the Sahara to Dakar, so as to pick up a boat there, but when France " packed up," that was out of the question, and the only route was round the Cape—*i.e.*, about 15,000 miles home and a somewhat hazardous journey ! I soon found out that Imperial Airways were flying a weekly plane from Cairo to Durban, whence passengers could pick up a boat, or train to Cape Town and find one there. Knowing full well that there were vast numbers of people wanting to return to England, and with only one plane per week, it became evident to me that I should have to pull a few strings in order to get on a plane at anything like an early date. With that object I visited the Embassy and explained my position and my mission under the Egyptian Government. I also got the University authorities to write to the Embassy saying I had finished my " job " and that they were not anxious to pay me maintenance allowance indefinitely. And then with references from G.H.Q. Middle East, that I was a late member of His Majesty's Forces, and in consideration of the fact that I was known to the Ambassador himself, with whom I had lunched, the Embassy staff were kind and gracious enough to put me on their priority list, and I actually left Cairo on July 14th. On request too, the Embassy were kind enough to enclose my voluminous report to the R.C.S. in the Embassy bag to be taken to England by the King's messenger, and with it I was allowed to enclose a letter to my wife, with whom I had been unable to communicate since the first week in June, except by cable.

(*To be continued*)

Reviews

Materia Medica and Pharmacology for Nurses. By GWENDOLEN HINES. Published by Faber & Faber. *Price 4s. 6d.*

PHARMACOLOGY is a difficult subject to introduce to nurses, entailing as it does some knowledge of the sciences of physics, chemistry and botany. This is one of the few books which have attempted to do it. As a book of reference, however, which is what nurses chiefly need, the arrangement is not entirely satisfying. One does not easily find the facts about any individual drug for which one is seeking, e.g., dosage, preparations, action and signs of poisoning. More definite headings would make the book more attractive to a nurse who is short of time and wants to verify some important fact. In some parts the pharmacology is too advanced for the nurse to understand. In a future revision the inclusion of points of particular interest and value to nurses would make the book much more useful, e.g., in the chapter on purgatives the fact that rhubarb colours the urine pink and that phenolphthalein has a repetitive action on successive days, and that there are certain contra-indications to the use of aloes. Numerous practical points of this kind could be included in the description of practically all drugs. The chapter on the Dangerous Drugs and Poisons Act is very good.

H. M. G.

Diseases of the Biliary Tract. By CARTER, GREEN and TWISS. Published by Balliére, Tindall and Cox, 1939, pp. 432. *Price 32s. 6d.*

THIS is a new book dealing with diseases of the liver and of the biliary tract from a clinical standpoint; its main purpose is the consideration of the modern views upon the etiology of gall bladder disease and the methods available for its investigation. From these points, an attempt is made to differentiate between those types of case most suitable for medical and for surgical treatment respectively, and the different methods of treatment are described and the results evaluated. The authors have enjoyed wide experience in the organising and running of an American clinic specialising in these diseases, and are thus able to substantiate the majority of their statements by a reference to their own actual figures. It is interesting to compare the statistics of the results that they present with the figures published by English clinics. The first part of the book describes the etiology of biliary tract disease in considerable detail, the second part proceeds with the routine diagnostic investigation of the patient, ; the third is devoted to medical treatment and the fourth part to surgical management. It is a pity that more data relevant to the value of Vit. K in the preoperative treatment of jaundice and of its effects upon postoperative hæmorrhage were not available at the time of going to press, but this can be remedied in a later edition. The text is clear and concise and is well illustrated; it presents little new material, but as a critical survey of our present knowledge of biliary diseases and their clinical investigation, it is amazingly complete and yet remains practical.

N. A. N.

Model Answers for the " Preliminary " Nursing Examination. By HECTOR MACPHAIL. Published by Faber & Faber. *Price 5s.*

THIS type of question and answer book is popular, and useful for nurses working for examinations. This is one of the best of its kind. The answers are concise and of a standard which should and can be aimed at by the average nurse. The writer understands the difficulty that many excellent practical nurses have in expressing themselves on paper, and this book will prove a valuable help to many in revising the subjects for the Preliminary State Examination.

Sport

Rugby

A REVIEW OF THE SEASON 1940-41.

NOW that the season has drawn to a close it might be interesting to write a short review of the season as a whole.

Little need be added to what has already appeared in the *Gazette* about the 1st XV. This team has consisted of the best XV it has been possible to collect of Guy's men, wherever they might be in the Guy's sector. Mr. George Winston had collected together a full fixture list with games every Saturday and also on a few Wednesdays. Owing to transport difficulties and the distribution of the students, it was only possible to play three games outside London, and these were against Aldershot Command, Bedford and Cambridge.

An " A " XV also functioned at Guy's for the whole season, but to complete this team it was necessary to call on the help of players from Farnborough. Among those who made it possible for the " A " to have such a successful season, the names of George MacVicar and P. Maxted must be mentioned from Guy's, with D. Gullick cooperating from the Farnborough end. This team had its most important games against the old rivals St. Mary's, and after losing the first game at Teddington, won the second at Honor Oak Park.

A Farnborough team played a number of local games on Wednesdays, but did not play on Saturdays owing to the number of their players wanted for the 1st and " A " XVs at Guy's.

The Rugger in the Tunbridge Wells area has probably been the least public during the last season, but it has definitely been the most important as far as the future of Guy's Rugger is concerned. Under the heading " Tunbridge Wells area," we include Sherwood Park with the Medical and Dental Schools and also Pembury Hospital. This area has functioned as far as possible as one unit with co-operation between the different portions. At the beginning of the season a meeting was held at Sherwood Park at which P. C. S. Campion and W. N. W. Lamond were chosen as joint captain-secretaries. W. Lamond soon left for the R.A.F., and so Campion was left with the job of arranging all the fixtures and teams. He carried out this job with the greatest industry and enthusiasm, and it was very largely due to him that the season as a whole was such a success. Unfortunately at Christmas he was forced to give up due to injury, and P. D. Harvey was elected in his place and carried on most ably for the rest of the season.

The Tonbridge Club again very kindly allowed us the use of two of their fields and their clubhouse. Up till Christmas it was quite usual to have as many as four teams playing each Saturday with never less than two, and at the end of the season two teams were still playing regularly. In addition, there were a number of games on Wednesdays. The 1st XV had their best games against Tonbridge School, Tonbridge Club, Christ's Hospital Horsham, and a number of Army sides, including two games against the London Scottish. These games have shown that Guy's will have no lack of good material for the next few years at least, and special reference should be made to the following players :—E. K. Harris at full-back is very steady, but he must try to develop his left kick. ; the Macrae Gibson brothers are versatile outsiders who can play in any position behind the scrum ; J. B. Kyle on the wing, though small, is an excellent player and knows the game ; J. H. Lewis at centre and A. G. Starte at scrum-half have played some very good games ; G. N. Evans and P. D. Harvey are hard-working forwards, but by far the most useful players among the newcomers are P. L. Brangwin at centre and A. B. Lee in the forwards. Both these players played regularly for the 1st XV towards the end of the season, and they will undoubtedly continue to do so as long as they are at Guy's. Lee, especially, is heading for first-class Rugger.

With such players as these we can look forward to next season with every prospect of good results.

M. R. MULLINS.

RUGBY SEASON, 1940-41

THE season of 1940-41 being completed, I have pleasure as in past years in presenting Chart and Statistics of the 1st XV.

The whole fixture list was an emergency one, and again our thanks are due to Mr. G. A. R. Winston for arranging such an attractive fixture list under difficult circumstances.

It is perhaps interesting to compare with the previous season's results. Actually 25 games were arranged ; 3 were, however, scratched due to inclement weather, etc. The total played was 22 games, which is the same number as played last season.

The scoring both for and against is similar to that of last season, but, on the whole, out figures

GUY'S HOSPITAL R.F.C.

SEASON 1940-1941

97th Season

PLAYED	WON	DRAWN	LOST
22	13	2	7

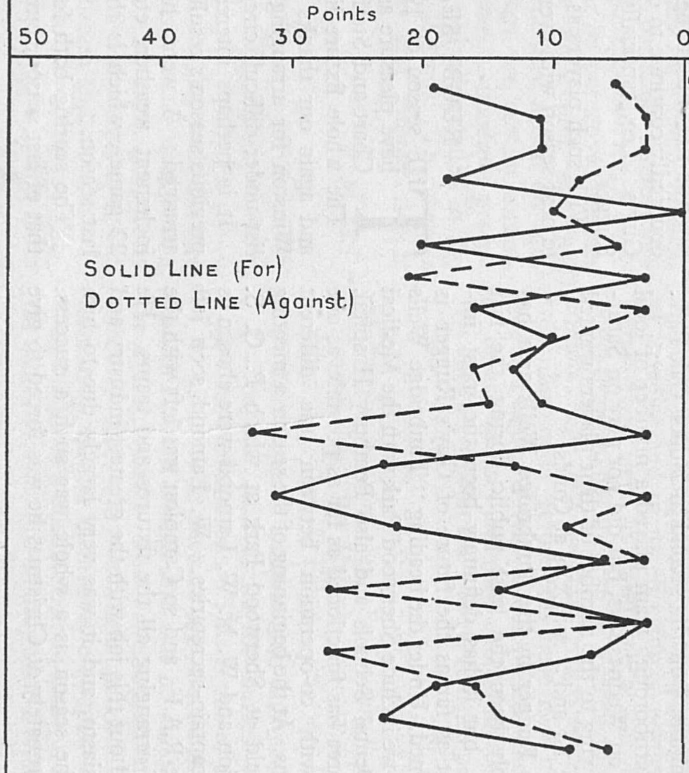
Percentage
63·63%

Average Points Per Game (For)
13·27

Total Points (For)
292

Average Points per game (Against)
11·5

Total Points (Against)
253



OPPONENTS	DATE	G^{D}	SCORE Points		For		Against		GOALS	TRIES
			F	A	Gl.	T	Gl.	T		
Charing Cross Hospital	1940 Sept. 28	H	19	5	2	3	1	–	Williams, Lewis	Lilleywhite, Breen-Turner Gartrell, Fuller, Renton
St. Bart's Hospital	Oct. 5	H	11	3	2^{+}	1	–	1	Mullins 2^{+}	Harriet, Fuller
London Hospital	" 19	A	11	3	1	2	–	1	Mullins	Lewis, Camp, Strathie
Middlesex Hospital	" 26	H	18	8	3	1	1	1	Mullins 3	Halamandes, Camp 3.
Metropolitan Police	Nov. 2	H	–	10	–	–	$2^{+\phi}$	1		
Kings College Hospital	" 9	H	20	5	2^{+}	4	1	–	Mullins 2^{+}	Camp, Gartrell, Everall, Mullins Wiggins
St. Mary's Hospital	" 16	A	3	21	1^{+}	–	3	2	Mullins $^{+}$	
Aldershot Command	" 23	A	16	3	2	2	–	1	Mullins 2	Camp 3, Gartrell
St. Bart's Hospital	" 30	H	10	10	1^{ϕ}	2	1^{ϕ}	2	Strathie $^{\phi}$	Gartrell, Mullins
Rosslyn Park	Dec. 7	H	13	16	3^{+}	–	2	2	Kynaston 3^{+}	Renton, Camp.
Wasps	" 14	H	11	15	1	2	1^{+}	4	Kynaston	Forster 2, Kynaston.
New Zealand Army XV	" 28	H	3	33	1^{+}	–	3	6	Kynaston $^{+}$	
Public Schools XV	1941 Jan. 15	H	23	13	4	1	2	1	Mullins 4	Macrea-Gibson 3, Camp, Manning
London Hospital	Feb. 1	H	31	3	5	2	1^{+}	–	Kynaston 5	Macrea-Gibson 2, Sharpe, Gartrell McCall, Camp, Mullins
Wasps	" 8	A	22	9	2	4	–	3	Mullins 2	Camp 2, Swann, Sharpe, Fuller Gartrell.
Aldershot Command	" 15	H	6	3	1^{+}	1	–	1	Mullins $^{+}$	Strathie
Cambridge University	" 19	A	14	27	1	3	3	4	Mullins	Gartrell 2, Camp, Strathie.
Rosslyn Park	" 22	A	3	3	–	1	–	1		Matthews
St. Mary's Hospital	Mar. 1	H	7	27	$2^{+\phi}$	–	3	4	Mullins $^{+}$ Manning $^{\phi}$	
Bedford	" 8	A	19	16	3^{+}	2	3^{+}	1	Kynaston, 2 Mullins $^{+}$	Charlton 2, Brangwin 2.
St. Thomas's Hospital	" 15	H	23	14	3^{ϕ}	3	3^{++}	1	Kynaston, Mullins Strathie $^{\phi}$	Gartrell 2, Brangwin, Camp Scott
An Army XV	" 22	H	9	6	2^{ϕ}	–	–	2	Strathie $^{\phi}$ Kynaston.	Gartrell

Indicates $^{\phi}$ Dropped Goal
Indicates + Penalty Goal

are an improvement on the previous season's for the same number of games.

Again no matches were played in the Hospital Cup Competition, but a side was entered in the Middlesex " Seven-a-side " ; also the Hospitals ran a " Seven-a-side " tournement, in which a team was entered. In the first event Guy's reached the semi-final ; in the fourth round we met O.C.T.U., Sandhurst, and after the score at full time was 3 all, we went on to win in the extra time by 2 tries to one try, in the fifth round against Rosslyn Park, Guy's went on again to win 5-3 ; Cambridge University were then met in the semi-final, and won this game by 14 points to nil. Guy's are to be congratulated on getting to the semi-final on the first occasion for many years that they have entered this tournament.

Team.—Lewis, Camp, Strathie, Scott, Breen-Turner, Sharpe and Mullins.

In the Hospital games Guy's beat St. George's in the second round 24—0, but were beaten by Middlesex in the semi-final 8—0. Middlesex are to be congratulated on going on and beating St. Mary's in the Final.

Guy's Team.—Lewis, Gartrell, Strathie, Scott, Mullins, Sharpe and Breen-Turner.

To return to the fixtures, Lewis played in all the games with one exception—a splendid record.

Our highest score was 31 points against London Hospital, and the highest score against us was 33 points by New Zealand Army XV.

Thirty-nine players have taken part in 1st XV matches, as follows :—Lewis (21), Gartrell, Renton (20), Sharpe, Kynaston (19), Camp, Everall, Mullins (18), Strathie, Albers (17), Scott (14), Matthews (11), Vidot Charlton (10), Breen-Turner, Fuller, Rochford (9), Brangwin, Swann (8), Harrett (6), Wiggins, Evans, Lee (5), Manning (4), Williams, Bulstrode, Wooldridge, Macrae - Gibson (3), Osmond, Halamandres, Forster, MacVicar, Ripman, Harrett (2), and McCall, Hanson, Lillywhite, French, Hinde (1).

The following have scored tries :—Camp (15), Gartrell (11), Macrae - Gibson (5), Strathie, Brangwin, Fuller, Mullins (3), Renton, Forster, Sharpe, Charlton (2), Lewis, Everall, Scott, Lillywhite, Matthews, Harrett, Manning, Kynaston, Wiggins, McCall, Swann, Halamandres and Breen-Turner (1).

The following have scored Goals :

	Tries Converted.	Penalty Goals.	Dropped Goals.
Strathie	—	—	3
Mullins	16	6	—
Williams	1	—	—
Kynaston	12	2	—
Manning	—	—	1
Lewis	1	—	—
	30	8	4

making a total of 64 Tries, 30 Tries converted, 8 penalty Goals, 4 Dropped Goals. Total points, 292.

Our Opponents' score was as follows :—61 Tries, 22 Tries converted, 6 Penalty Goals, 2 Dropped Goals. Total points, 253.

Therefore the completed figures are :—Played 22, won 13, lost 7, drawn 2. Points for, 292 ; against, 253. Average points per game for, 13.27 ; average points against, 11.5. Percentage, 63.63 per cent.

War Season's Figures

Season 1939-40. — Played, 22 ; won, 12 ; drawn, 0 ; lost 10. Points for, 300 against 257. Percentage, 54.5.

Season 1940-41. — Played 22 ; won 13 ; drawn 2 ; lost 7. Points for 292 against 253. Percentage, 63.63.

ROY C. HOLLOWAY,
Hon. Life Member, G.H.C.U.

Hospital Information, etc.

FLAG DAY, MAY 6TH, 1941

THE Appeal Committee wish to tender their very grateful thanks to all Students, Nurses and other members of the Staff who so actively and willingly assisted on Flag Day.

Everyone, it is felt, will be pleased to learn that the sum total collected was £1,601, this sum being more than the total collected during the whole of last year's efforts, and over £600 in excess of the corresponding Flag Day last May.

There is no doubt that this excellent result was greatly due to the Students who came in large numbers from Pembury, Sherwood Park, Farnborough and Orpington. Their enthusiasm as collectors was not over shadowed by the magnificent effort made by many to catch an early 'bus at 6.30 in the morning.

The old Hospital, too, seemed to welcome them home, and it was good to see so many Students, after the hard day's work was over, in the Hospital. It is hoped that the late 'bus did pick up all those who intended to go by it, and that there were no sore feet next morning through hiking home.

The collections taken at Farnborough and Orpington speak well for the persistence of Guy's people as collectors. Last year the Cray Valley Hospital collected the sum of £87. This year the arrangement was, in the same area, to share on a fifty-fifty basis between Cray Valley Hospital and Guy's. The figures given in detail below speak for themselves :

Guy's Hospital		
Orpington	£56 8 5	
Farnborough	46 11 0	
		£102 19 5
Cray Valley Hospital		
Orpington	£88 13 10	
Farnborough	15 17 1	
		£104 10 11
		£207 10 4

Each Hospital has £103 15s. 2d.

Another opportunity seized by the Students was in the Finsbury area. The Hospital was notified at very short notice that this area was not covered and a party of Students, under an able leader, was sent to tackle this problem. Their 'bus was a travelling depot. No Lyons was available for food, but they came back hungry but satisfied, with some fifty full tins and cheques to the value of fifteen guineas, the sum total being £68 7s. 6d.

The Hospital has cause to be very grateful for a job undertaken and very well done.

Papers by Guy's Men

Cameron, H. C. Fifty years' progress in Pædiatrics : Staphylococcal Infections. *Clin. Jour.*, 1941, **70**, 113.

Jarman, Ronald. History of Intravenous Anæsthesia with six years' experience in the use of Pentothal Sodium. *Post-Grad. Med. Jour.*, 1941, **17**, 70.

Symonds, C. P. The Neurological Approach to Mental Disorder. *Proc. Roy. Soc. Med.*, 1941, **34**, 289 (Sect. Psychiat.).

Herbert, W. E. Two cases of Calcification of the Dental Pulp following Injury. *Brit. Dent. Jour.*, 1941, **70**, 369.

Rushton, Martin. Oxycephaly and Supernumerary Teeth. *Ibid.*, 370.

Guy's Hospital Reports, 1940-41, Vol. 90.

Contents

Cameron, H. C. Patrick Playfair Laidlaw. P. 1.

Kilpatrick, F. R. : A case of pseudo-laryngocele (cervical aerocele). P. 15.

Simpson, C. Keith : Gastric lesions following head injuries. P. 21.

Brock, R. C. : Epithelioma of the œsophagus secondary to achalasia of the cardia. P. 23.

Eckstein, F. M. P., Lubran, M., and McKeown, T. : Fluctuations in the blood electrolytes in relation to the menstrual cycle. P. 28.

Jacoby, N. M., Ripman, H. A., and Munden, J. M. : Partial anonychia (recessive) with hypertrophy of the gums and multiple abnormalities of the osseous system. P. 34.

Seelig, S. F. : Treatment of gastric ulcer with Vitamin A. P. 41.

Bruce-Pearson, R. S. : Observations on the effect of injection of pollen extracts on the skin sensibility of hay-fever subjects. P. 55.

Notice

THE WILLS LIBRARY

Soon after the outbreak of war, the Sector Hospitals at Pembury and Farnborough received on loan from the Wills Library about sixty and fifty volumes respectively, for the benefit of students posted to these hospitals. It has been reported that a small proportion of these remain, and students now at these hospitals are deprived of access to the text-books so essential to their studies, thereby ruining all the advantages it was intended they should enjoy when directly cut off from the Wills Library.

Borrowers, who have any of these books in their possession, are invited to return them to the Wills Library, where they would be gratefully received for re-distribution.

Awards

Miss A. C. Robins, Matron Bristol General Hospital, has been awarded the O.B.E. for " the utmost devotion to duty " when her hospital was hit by high explosive and incendiary bombs.

Changes of Address

Llewelyn Evans, L.D.S., R.C.S., 41, Harley Street, W.1. *Langham* 1546.

R. A. Andrews, Surg. Lt.-Cmdr., H.M.S. *Pretoria Castle*, c/o G.P.O.

D. Bugg, F/o R.A.F.(V.R.), c/o National Provincial Bank, Kenton, Middlesex.

Deaths

POLLOCK.—On April 25th, 1941, at his residence, Wilderose, Exton, Exeter, John R. R., M.R.C.S., L.R.C.P.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV 14*th June* 1941 *Number* 1380

PASSIM

NOW that the base hospital scheme has firmly entrenched itself throughout the country, and most of the ruffles in the organisation have been either ironed out or accommodated, one begins to wonder whether this new system of things could not be extended further. Most of the general practitioners have accepted the base hospitals in their district very favourably and have shown every desire to co-operate with them; in fact, it is not unusual for them to send their cases along to these hospitals for another medical opinion and, if special treatment is indicated, they show every wish for it to be carried out locally. Most of these doctors now hold Government appointments of one kind or another, and it does not seem unreasonable that they should make these bases their headquarters. Depending upon how busy they were with their private practices, they could assume various responsibilities in the hospital itself, avail themselves of its facilities, and at least administer to their own patients requiring hospitalisation.

Gradually small out-patient departments could be set up, the growth and size of which being governed by the number and kinds of out-patients attending these departments. The time that each doctor devoted to hospital duties would be entirely a voluntary amount, depending on the demands of his private practice and his interest in hospital methods.

Here, then, is a natural State Medicine, not built up by artificial boundaries, conjectures and conceptions of what the " new order of things " might be like after the war. Clearly it is an advantage to the general practitioner, for not only would it preserve in him a keen medical sense and keep him abreast of modern ideas and methods, but it would enable him to build up a more balanced practice. Intelligent patients would respect him all the more because of his hospital connections and even the worldly ambitious type of doctor would be satisfied because no longer would it be necessary for him to go out in search of large " panels "; instead, his income would be stabilised in accordance with the extent of the hospital duties he was able to assume. The consultant class of medical person would also benefit appreciably from such a system because it would bring him into closer contact than ever before with the general practitioner. By working together in such harmony the general practitioner would learn to appreciate the special merit of his consultant adviser and, what is even more important, at what stage in his patients' illness to seek such advice.

The immediate benefit to the E.M.S. would be that it could now release more of its officers to the Armed Services where at present a scarcity of medical personnel exists. In addition, there would be considerable saving of energy and expense. At present the practitioner sees a case in a London suburb and, if necessary, sends it up to out-patients, where the case is re-examined and the required investigations carried out. After weighing the medical evidence, it may appear advisable to admit the patient into hospital; he is then either admitted in London to be evacuated later or put down for evacuation on the next convoy. If he is lucky, which is unusual, the patient may find himself shipped back to his own district; otherwise he finds himself miles from home, which is a source of worry and inconvenience to relatives and friends especially in times of emergency.

Such a system entails maintaining a large staff of doctors, nurses and almoners, to serve the active out-patient departments in the central danger areas, and also results in much inconvenience to the patient, who, often in a rather poor state of health, is called upon to make frequent journeys under travelling conditions which are not at their best at present; in addition, there is much duplication of work on the part of the series of medical attendants which the patient sees in succession. Perhaps it would be simpler if the general practitioner saw his case himself at the local hospital, carried out the investigating he thought necessary with the patient attending as an out-patient from his home a short distance away and, if in-patient's treatment be considered necessary, the doctor concerned could carry on in the wards from where he left off at out-patients. The consultant group of physicians and surgeons could hold regular out-patient and ward sessions each week to examine cases referred to them, and this might be followed by a round with the general practitioner on his private cases in the district. One consultant could thus serve several base hospitals and build up a considerable practice without all the geographical difficulties that confronted him in pre-war days.

The teaching of medical students, probably the most important aspect of medicine, would also improve under this scheme. Recently there has been a tendency to replace the bedside experience for which Guy's has become famous, by a more remote teaching technique, which consists of massing large numbers of students in a lecture theatre and systematically pouring information down their throats to be retained until the next examination. To ward off the otherwise inevitable growth of this pernicious system the student body could be divided up into small firms and distributed evenly throughout the Sector Hospitals. Here, once again, they would become clerks to their patients and by personal observation and examination glean their clinical knowledge which, taken all in all, ought to be sufficient after a three-year period to make the student a successful examination candidate as well as a competent doctor with a method in medicine and surgery.

Tetanus

A Clinical Lecture delivered at Guy's Hospital in May, 1941, by Dr. A. H. Douthwaite

GENTLEMEN,—An excruciatingly painful and deadly disease whose origin lurks in our soil or even in the dust of the streets is, by its dramatic manifestation, sufficient to attract more than ordinary interest even though its occurrence be relatively rare. In times of war its importance has always loomed large in relation to combatants. Now civilians afford a ready prey to the bacillus, not only those in towns, but also those who, in apparent security, are digging the land to increase its productiveness.

Although well manured soil is the most dangerous contaminant of a wound it is now known that the tetanus bacillus is a normal inhabitant of soil quite irrespective of the presence of animal excreta. Thus fifteen years ago I attended a boy who had cut his knee during a game of football played on a field which had certainly not been used for grazing or for agriculture for twenty years. He developed tetanus and died. Of special interest to us is the danger of infection from catgut and from wool, particularly the brown wool which was at one time freely used as a padding beneath plaster splints.

The organism of tetanus is a strict anærobe. It is possible to inject tetanus spores, freed from bacilli and toxin, without fear of producing disease. Spores may lie in the depth of a wound, which may heal over, without germinating. Injury to this area months later may result in tetanus.

A dirty wound with much tissue damage is always to be feared, for tissue injury produces local changes which favour growth of anærobes by reduction of oxygen tension. The popular belief that a cut of the skin margin between the thumb and index finger will produce " lock-jaw " is to be attributed to the frequency with which gardeners damage this area by friction against soil-contaminated tool handles.

Spread of Tetanus Toxin.—Injection of tetanus toxin into a limb whose nerves have been divided will not cause tetanus. Injection of a lethal dose of toxin into a purely sensory nerve will not cause tetanus. The toxin is taken up by the end-plates of the motor nerves and spreads to the central nervous system along the axons to reach the anterior horn cells or their analogues in the brain. There the poison becomes firmly fixed and no therapeutic measure is known which will dislodge it. Although in instances of mild infection, or in infection in persons largely protected by antitoxin, the effect of the toxin is limited to the motor cells of the wounded area, in the majority of cases the reverse obtains and there must be a rapid spread along the spinal cord to account for the generalised rigidity of the disease. Furthermore, the motor cells of the trigeminal nerve must be peculiarly attractive to the toxin; otherwise it is difficult to explain the great frequency with which trismus is the earliest *symptom* of tetanus even though the injury be in a limb. This is, perhaps, analogous to the specific affinity of the oculo-motor nerve or its nucleus to the diphtheria toxin. In any case the result of the arrival of the poison at the motor cells so as to increase their irritability that normal stimuli reaching them from the sensory side of the reflex arc, or from the higher motor centres, cause excessive discharge of motor impulses to the muscles which they govern. A comparison with the action of strychnine suggests the probability of a reduction of the normal synaptic resistance to inflowing impulses.

Pathology.—Naked-eye evidence of tetanus is not always seen at autopsy. Asphyxia will show itself in subpleural hæmorrhages, engorgement of the right side of the heart and great veins. When present a characteristic sign peculiar to this disease and to strychnine poisoning is rupture of skeletal muscles which are otherwise normal. A man dying of tetanus at Guy's last year showed a transverse rupture of the rectus abdominis (specimen demonstrated) and of one psoas muscle.

Incubation Period.—This interval varies greatly according to the state of the wound which, as we have seen, influences the rate of development of local infection. Furthermore, the length of nerve which has to be traversed by the toxin is also a factor in determining the period of incubation. The limits have been given as one to twenty days. In actual fact three to fourteen days covers most instances. I shall show you later how important prognosis is the estimation of the incubation period in each case.

Symptoms.—The early and sometimes the only symptoms of tetanus are referable to tonic rigidity of voluntary muscles. Difficulty in opening the mouth, or in swallowing, is common. Sometimes the first complaint is of stiffness of the neck or of the back. I have seen a man whose only discomfort was in the lumbar region, and he decided that he was suffering from severe lumbago. Actually he was then unable to open the mouth fully, but this he had not noticed. The muscles in the affected area are felt to be firmly contracted, so tense in fact as to give the impression of being of iron rather than of soft tissue. Severe muscular pain does not seem to occur at this stage, but the pain which is felt is usually centred in the joint or joints involved by the spasm together with more widespread aching. Thus pain in the temporomandibular joint, or in the ear, is often met with.

With the development of generalised stiffness the face may present the *risus sardonicus* produced by a drawing backwards and slightly upwards of the corners of the mouth and of the outer portions of the eyebrows. The expression is exemplified by certain elderly women who, in an attempt to regain youth, have their faces " lifted." There is the contortion of an early smile yet no accompanying humour. Usually the back becomes arched so that one can pass the forearm easily between the sufferer and the mattress. The abdominal muscles are likewise board-like in their rigidity, whilst those of the limbs are more variable. Usually there is rigidity in extension. The tendon reflexes are exaggerated unless a high degree of tonic spasm be present when they can no longer be elicited.

This state of rigidity represents the first stage of the disease and is known as the Stage of Onset (Cole). The length of its duration is of even greater importance prognostically than is that of the incubation period. It usually lasts for about two days, but may be as short as twelve hours or as long as five days, before the appearance of the second stage, namely that of Reflex Spasms. These, however, do not always occur, in which case the stage of tonic rigidity persists for a few days up to two weeks and gradually passes off leaving the victim weak but intact.

Tetanic Spasms.—These first appear in response to a fairly strong stimulus and may affect the stimulated limb only. For instance, when I examined the man whose muscle you have been inspecting no spasms had occurred, but one arose in the right lower limb when I moved it in order to estimate its rigidity. Later generalised spasms occur and appear to arise spontaneously, though it is probable that they are truly reflex. The condition of the patient is then horrible to behold. In the pre-avertin days it was an unforgettable and heart-rending experience to sit hour after hour, chloroform bottle in hand, ready to control the seizures as best as one could. A stare of fear comes into the man's eyes and he may even mutter " There's another coming " even as his face is drawn back in a hideous grin, the trunk is lifted from the bed in extreme opisthotonous, arms and legs are stretched out and sweat drips off a body wracked with pain and denied the blessing of unconsciousness. Respiration is arrested at the height of a seizure which may last for a few seconds to three minutes. Cyanosis is common. As is to be expected from such violent muscular exercise the pulse and respiration rates rise after each spasm and the temperature may mount steadily to hyperpyrexial levels. Death may result from this or from respiratory or cardiac failure, including rupture of the heart. Glottic spasm may cause sudden death from asphyxia. When death occurs it is usually within twenty-four hours of the onset of the spasmodic stage, but may be as late as four days. On the other hand, the seizures may be infrequent; gradually they diminish in intensity until they die away completely in one to three weeks. The underlying rigidity passes off more slowly and complete recovery ensues.

Aberrant Types.—(*a*) Mild forms. (i) Local tetanus produces stiffness of the muscles in the region of the wound and is most likely to be seen when antitoxin has been given, though not in sufficient amount or early enough to prevent the the attack. (ii) Tetanus rigidity without spasm. According to Cole the incubation period is usually greater than fourteen days. (iii) A severer variant of the above is tetanic rigidity with spasm only as a response to strong stimulus and often confined to a limb.

(*b*) Severe forms. (i) Cephalic. This fatal type arises from infection of head or neck wound and the signs may be limited to one side of the face. Ophthalmoplegia, facial spasm or paralysis, trismus, laryngeal spasm, and dysphagia may appear and death occurs early. It is of interest to note that paralysis of the seventh nerve may be present at the same time that the fifth nerve is showing signs of intense stimulation.

ii) Splanchnic. A rare and invariably fatal form due to infection from the alimentary tract. The medulla is attacked *via* the vagi. Bouts of intense dysphagia and of spasm of tongue and glottis may kill within a few minutes.

iii) Infantile tetanus arises from infection of the stump of the umbilical cord. It is very prevalent in the tropics amongst the poorest people who live in filth. Even early in this century, however, over 60 per cent. of new-born children died in an island of the Western Hebrides from this form of tetanus.

Prognosis.—Statistics of recovery rates derived from of undifferentiated series are valueless when applied to an individual problem. They show a little under 50 per cent. recoveries. Cole and Spooner have given us a most valuable contribution to the study of prognosis and treatment of tetanus and my subsequent remarks are based on this.

(i) Age. Tetanus neonatorum is usually fatal. Old age is a bad prognostic feature even though the attack of tetanus appears to be mild.

(ii) Incubation period. If the period between infection and the first symptom is less than a week the prognosis is bad. If it is greater than twelve days the outlook is good, but, as I mentioned earlier, the—

(iii) Period of onset is of much great importance. If it be less than two days death will probably occur no matter what the length of the incubation period or the thoroughness of treatment adopted. A period of onset of three days, given adequate treatment, may be followed by recovery. Four days or more are favourable.

(iv) Combined Period (Incubation and Onset). In Cole's series this was eight days or more in all patients who recovered and never more than seven days in those that died.

This author rightly points out that to obtain a correct impression of the value of methods of treatment the effects of specific therapy should be considered on patients with an incubation period of six days or less and a period of onset of two days or less. Should these subjects live it would be fair to conclude that treatment had been responsible. For those whose intervals were greater recovery might have followed irrespective of any active treatment.

(v) Site and state of wound. Wounds on the face and neck, severe wounds and those which cannot be thoroughly drained are fatal.

(vi) Aberrant types. The prognosis has already been indicated by their grouping.

Differential Diagnosis.—Although many diseases may cause difficulty in opening the mouth only one of these is likely to present any difficulty in diagnosis provided that reasonable care be taken. This is the state of impaction of an infected third molar tooth. Trismus is associated with pain shooting up to the ear or side of the face. We have seen that such pain may be present in tetanus. Local signs such as tenderness to pressure over the site of the third molar or pain on pressure on the second molar, swelling of the face and tenderness of the corresponding masseter will help. If the masseters and temporal muscles be palpated they are hard on both sides *as a rule* in tetanus, whereas in the dental complaint this is most marked on the affected side. Although jaw stiffness may be the only early symptom of tetanus, examination will usually reveal tonic rigidity of some other part—e.g., neck, back, or wounded limb. Naturally the presence of a purulent wound favours tetanus. It should be possible, therefore, to decide the matter on the spot. History, local, and general signs will distinguish the trismus of arthritis and serum sickness (the temporomandibular joints may be first involved) from that of tetanus. Hysterical trismus always yields to sleep which can be induced for diagnostic purposes with morphine. Actually hysterical trismus is invariably overdone. The teeth are tightly clenced and the lips firmly compressed. Tetanus has been mistaken for acute lumbago and for acute spondylitis, but in neither is the persistent contraction of the sacro-spinales together with abdominal rigidity present. It is even more remarkable that tetanus victims have been subjected to laparotomy on account of a supposed abdominal emergency. The pain of tetanus at this stage is not severe, however, neither do we ever find the extreme rigidity of the spinal muscles in peritonitis, yet it is always present if tetanus affects the whole abdominal musculature. The history and the finding of trismus should make error impossible.

Strychnine acts on the spinal cord in a similar manner to the toxin of tetanus. Poisoning produces tetanic convulsions and *risus sardonicus*, but there is complete relaxation between the spasms This never occurs in tetanus. The strychnine spasms come as the first sign of poisoning; there is nothing to correspond with the tetanic period of onset. Strychnine convulsions are ushered in with twitching in the extremities; trismus is not a special feature and is usually absent. There is often a helpful history of the taking of bitter-tasting food or drink. In fatal cases death occurs after a few convulsions.

Treatment.—(*a*) Prophylactic. Thorough cleansing of a wound contaminated by dirt is the first precaution. Where there is reason to fear infection, antitoxin should be administered subcutaneously or intramuscularly in amounts ranging from 1,000 to 3,000 units (B.P. doses 1,000 to 2,000 units) the larger doses being reserved for extensive dirty wounds. In towns, on account of the modern construction of the roads, the tarring of their surfaces, and the diminishing amount of horse manure on their surfaces, the danger of tetanus in wounds is slight compared with those received in open ground. In the last war tetanus occurred in 1.6 per cent. of the wounded until the routine use of 500 units of antitoxin was introduced. The figure then fell to 0.2 per cent. The amount was repeated weekly until four doses had been given. When it has been impossible to clean the depths of a severe wound the initial dose of 3,000 units should be supplemented by further amounts of 500 units at the above intervals.

Tetanus toxoid marks the greatest advance in prevention. It is included in the second addendum to the *British Pharmacopoeia* 1932, under the title of Toxinum Tetanicum Detoxicatum. The original form consisted of sterile tetanus toxin whose specific toxicity had been removed by treatment with formaldehyde. Its immunising power is not destroyed by this treatment. Local reactions are minimised and antigenic power fortified by adding alum to tetanus toxoid and using a suspension of the resulting precipitate. This Alum Precipitated Toxoid is the preparation of choice, but must be specified on the prescription otherwise the the *B.P.* directs that the original toxoid shall be dispensed. The official doses are 0.5 to 1 mil. (8 to 15 minims). In point of fact two 1 c.c. doses should be given deeply subcutaneously with an interval of six weeks between them. From animal experiments and from reports of the use of toxoid on the French colonial troops, it seems clear that the protection afforded is very great. With increasing experience it is probable that we shall feel justified in withholding antitoxin from previously immunised persons unless their wounds be severe and heavily dirt-contaminated. Local or general discomfort arising from the injection of tetanus toxoid is negligible. In view of these facts it is to be hoped that the entire population of this country will be persuaded to submit to active immunisation against tetanus.

(*b*) Curative. The first step to be taken is the intravenous administration of 200,000 units of tetanus antitoxin. (Note that the *B.P.* therapeutic doses are only 20,000 to 40,000 units.) Spooner has shown that after such a dose 50,000 units are still in the circulating blood at the end of a week and rather less than half that amount at the end of a fortnight. If you compare these figures with a generous prophylactic dose—e.g., 1,500 units—you will see that the protection against further absorption of toxin is adequate for a fortnight.

The intrathecal injection of antitoxic serum has been largely abandoned. It shows no advantage over the intravenous route. On the contrary, the amount of serum needed for the former will inevitably produce a serous meningitis with further irritation of the spinal cord just at the time when such an effect is most likely to be dangerous.

Not until an hour after the injection has been given should the wound be disturbed. It must then be cleaned, excised if deep, washed with hydrogen peroxide solution and covered with light dressings soaked in peroxide. Antitoxin 500 units may with advantage be injected around it.

In mild cases not exhibiting generalised rigidity chloral hydrate grs. 30 and potassium bromide grs. 50 should be given as a single dose, and subsequently in half these quantities at four- to six-hourly intervals in accordance with the degree of drowsiness of the patient. When generalised rigidity follows upon a long incubation period or when avertin is not readily procurable, paraldehyde 1 drachm to the pint of saline should be administered per rectum. For the adult 6–8 drs. may be so given.

Chloroform, on which we relied in the pre-avertin days, is now used only to control sudden spasm arising before the giving of avertin, and to render its administration easier.

In all severe cases, as judged by the prognostic points enumerated, avertin (Alcohol Tribromoethylicum *B.P.*) 0.1 gramme per kilo of body weight (two-thirds grain per pound) should be given by rectal injection and repeated every four to six hours if spasms recur. The effect is greatly to reduce the frequency of, if not to abolish, spasms, and always to spare the victim the realisation of his dreadful predicament. Cyanosis should be countered with continuous administration of oxygen and, with signs of failing respiration, oxygen-carbon dioxide mixture should be used.

Curarine is too uncertain, dangerous, and difficult to procure to justify our considering it at this lecture.

Lastly, the sufferer must be fed and well fed, for his muscular exertion is costing him hundreds of calories. His sweating may also produce dehydration with serious loss of sodium chloride.

Swallowing is so often difficult, or impossible, and always liable to initiate tetanic spasm that it is better to pass a fine stomach tube through the nose of the anæsthetised patient. It can be left in position and egg, glucose and milk and, if sweating is extreme, normal saline can be given at frequent intervals.

In spite of the greatest zeal and care in carrying out this laborious treatment the mortality of tetanus will remain depressingly high. Never has disease more fittingly illustrated the maxim that prevention is better than cure. Now that the means of prevention is in our hands it is our duty by personal example as well as by precept to spread its use with all possible speed amongst the public.

REFERENCE

Cole, L., and Spooner, E. T. C., *Quart. Journ. Med.* 1935, 295.

Sector News

Guy's Letter

BY comparison with that of pre-war days, the present clinical teaching at Guy's must needs suffer. This disadvantage is, of course, occasioned by a lack of cases due to the sudden needs of an air-raid emergency, when beds in large numbers have instantly to be available. But that is not to say that those cases always in the wards do not represent a very fair selection of general clinical material, and it says not a word for the excellent out-patients which are hardly less large or varied than before the war Indeed, the Staff have good cause to congratulate themselves on the high standard of teaching still maintained, a standard which has made the name of Guy's famous the world over. There has been no large-scale air-raid on London for three or four weeks now. The rows of empty beds therefore offer a temptation that more cases might be taken in from out-patients. In the interests of both patients and potential casualties, the authorities wisely refuse to countenance such natural desires, and many a first-rate teaching case goes direct to a base hospital. Yet, despite this, we have heard a whine and read the plaintive protestations of those from our country hospitals in Kent, who complain of the cases sent to them from the mother hospital. More, these rustic malcontents raise their hands in pious horror as they infer that here at Guy's we take up an attitude of self-satisfaction and arid aloofness. If, then, they will not take the good with the bad, out of their own mouths they condemn themselves.

The Residents' Dinner was held last week at the George Inn, when many of those guests who were star turns at the old College dinners were again present. All enjoyed themselves thoroughly, and Mr. Harley had only his tie cut off.

It is hoped that the large bomb crater in the Front Quad. may be put to good use as a burial place for some of the Hospital cats. Unfortunately, these cats do not have to be present in person for their existence to be recognised. In fact, in the environs of theatres and the Out-patient hall they never have been seen, but always recognised. Naturally, any remarks about burial do not apply to those two sausage-shaped cats, or, maybe, dogs, that are often noticed exercising in the park and in the wards ; nor, of course, do they apply to Sister Bird's hermaphrodite Bill, nor the canine assistant in the radiological department.

One evening last week a number of senior Nuffield House residents were returning to the hospital after dark when they saw a light shining from what must have been the Nurses' Home. They called out in loud and indignant voices that the light should be extinguished. The head of a Sister appeared at a darkened window next to that from which the light shone. She explained, in answer, that the offending light could not be dealt with until its presence had been reported to the competent authority. On being told that the Lights Officer for the night was among the company, this sentinel of all that is good, comely and virtuous in nursing banged down her window with the retort that she was on day duty and nothing could be done.

In future, it seems likely that patients referred by the O.P.O's. from the Surgery to the Fracture

Clinic must be accompanied by a suitable vegetable or horticultural sacrifice to Mr. Wass. This new practice was begun last week, when Mr. Hallam sent up half-a-dozen tomato plants with a patient who failed to arrive. The plants are now doing well in a garden at Mill Hill. Mr. Blaikley's conversation has, of late, been increasingly difficult to understand. It concerns itself largely with potting and pruning, with sowing and hoeing. But, worse than this, he has been describing quite shamelessly how much of his garden has been dug by visitors and guests. Future visitors are recommended to get in touch with Mr. Eric Davies, who has first-hand experience of spasm of the shoulder-girdle following an invitation to Epsom last week-end.

Dr. Douthwaite's views on exophthalmos are derived solely from the standpoint of the Pekinese.

It is believed in authoritative circles that the presence of Rudolph Hess in this country was for a visit to Dr. Bishop's endocrine clinic for a course of injections of virility, of which the Nazis had hitherto claimed a monopoly.

R. T. H.

P.S.—Spare margarine coupons should be sent to A. Shein, Nuffield House, for purchase of striped trousers. Second-hand pair welcomed in lieu.

Orpington Letter

THIS week has seen the return of Dr. Hale-White and Mr. Batchelor from their holiday and, if their appearances do not belie them, a very good holiday it was, too.

But with Dr. Hale-White's return Dr. Vertue has departed, so we are again with one physician—which reminds us of the old verse :

" See, one physician like a sculler plies,
And inch by inch the patient slowly dies ;
But two physicians, like a pair of oars
Waft him more swiftly to the Stygian Shores."

What the role of the House Physician might be is not certain in our minds.

Last week we bade our farewells to Major Philpott, who has been with us in the capacity of Military Registrar for just over a year. Major Philpott has been put in charge of all the military hospitals in Norfolk and takes our good wishes with him in this new position.

With the recent depletion in the number of our patients, the Orthopædic octopus has withdrawn its tentacles to within the confines of the Orthopædic wards, and Mr. Batchelor's operating lists have been reduced to two figures. The constant dropping of the gentle rain from heaven upon the " dig for victory " plot beneath has left him with no excuse for watering it, and we have our fears lest he should become too introspective from sheer want of activity.

Mr. McNair has caused another record to be broken, and Orpington can now add a Cæsarian section to its list.

B. D. J.

Pembury Letter

INITIALS have come and initials have gone from beneath the sector letters. N. M. J. alone have remained, through the whole time of their existence, as perpetrator of the Pembury Letter—that constant thorn on the seat of the mighty—that Damoclean stone above the glass-house that is Sector 10. Now these, too, have gone to the loss of the many that have not waited in vain to be amused as they read of life at Pembury, and to the relief of the few whose consciences have led them to open their *Gazettes* with uneasiness. But, though Dr. Jacoby has left the pages of the *Gazette*, we are pleased to say he is still with us ; and, while his readers have lost, no doubt the nation's food reserves will gain provided the slugs fail to get their say in first.

How many of us when, as ward clerks, we were first introduced in the bacteriological department to those luscious media which are the prerogative of even lower forms of animal life, have had the urge to sample them ? During a recent whooping-cough epidemic a cough plate was left temporarily unattended near a suspect who, being tempted, fell and, when the nurse returned, was found with the plate in one hand and a spoon in the other happily attacking this unaccustomed luxury. No report has returned as to the species of the child.

One evening recently a well-known Guy's surgeon was intending to operate, and the theatre nurse, determined to have everything to his satisfaction, came to the door of the surgeon's room and enquired of his H.S. : " Is there anything special that Joey likes ? " (" Joey " was apparently an irrespectful way of referring to the well-known Guy's surgeon.) Whereupon a voice came from behind the door : " Let Joey tell you himself." The rest of the incident becomes rather confused.

G. L. L. R.

Farnborough Letter

LAST week the Hospital was honoured with a visit from the Minister of Health. Our evidence for this assertion is circumstantial and rests upon three basic points. The first of these is the fact that a notice appeared in the Mess on Saturday stating that the Minister would be coming on the following Monday. The second clue is a report that a group of people was seen wending its way round the Maternity Block on the Monday in question; and the third is a report that a sitting-room in the Nurses' Home was requisitioned for a tea-party on the same day. As no great change was made in the general routine we presume that the Minister wished to see the Hospital under working conditions; we are tempted to wonder what impression he took away of the principles of child welfare as illustrated in the Nursery. We regret that our account of the visit is somewhat fragmentary, but we have been unable to trace anyone who could supply any further details.

Our roving Sub-Dean, Dr. Forman, among the many words of wit and wisdom which he lets fall at our table from time to time, has expressed the opinion that we are the worst fed Mess in the Sector. This made me feel a certain stoical pride in view of the complaints about food which have appeared in the *Gazette* from Guy's and Orpington. At the same time we must confess to having entertained on occasions some fears on behalf of Dr. Mutch, who stolidly refuses to eat anything which he cannot recognise, fears that one day his none " too solid flesh would melt, thaw or resolve itself into a dew." However, when Dr. Stephens walked in with macrocheilia and the news that the bees are swarming, when Mr. Hamilton assured the assembled company that his onions were nearly as tall as the counter, and Dr. Brown promised a continuous supply of celery during the winter, hope again sprang up in our breasts.

Great activity has been evident of late among the student team of fire-fighters; we were particularly struck during a recent exercise by the driving of Mr. Lee, the outfit of Mr. Terry, and the nautical swing with which Mr. Buxton hauled up the hoses to dry.

V. C.

A Trip to Egypt in War Time

By Colonel E. B. Dowsett, D.S.O., T.D., M.R.C.S., L.R.C.P., L.D.S.

(Consulting Dental Surgeon, Guy's Hospital)

(*concluded*)

On going to Imperial Airways on July 13th at 4 p.m. to weigh my luggage and show passport, I was told that I had not obtained the various visas and exit permit, without which I could not leave. Being Saturday afternoon, it was now too late to get them, and the plane was starting next morning. The ticket agency had let me down badly by not informing me. I at once rang up the British Consulate and it was closed until Monday morning. I rang up the Consul-General at his private house—there was no reply. I then rang up the British Embassy—the Secretary I knew was out. Fortunately, at this moment Dr. C. Hall appeared to take me out to tea. He happened to know the other Secretary, who was on duty. So we at once drove up to the Embassy, and after much explanation he agreed to endorse my passport as Colonel (retired) of the British Army, with the Embassy stamp. The situation was thus saved, as with that endorsement I needed no visas at all, and incidentally I was saved all bother at every custom's office for the whole journey. The shade temperature being well over 100 deg. F., I was very hot and sticky by this time with excitement and anxiety as to whether I could get off—so that tea with Dr. Hall at the Sailing Club on the Nile was more than welcome.

The remainder of this narrative is a copy of the Diary I kept from the day I left Cairo, except that dates and times are omitted by request in the later part.

July 14th. — Left Hotel. Drove through Choubrah to Rod el Faraq port on Nile for Imperial Airways. Dr., Mrs. and Miss Hall and Dr. and Mrs. Guindi Wasif on barge already there to see me off; 16 passengers on plane.

General Sir A. Wavell, the C. in C. Middle East among the passengers. As I was D.D.M.S. 20th Corps in 1918-19 when he was G.S.O.I of same corps, we had a few reminiscences of the last war. Also on board were two men on a Government economic mission in Switzerland and who got caught when France collapsed, like rats in a trap. They had induced a Swiss to fly them out over Milan, Trieste, etc. to Turkey, thence they came by train and car via Iraq, Syria and Palestine to Cairo, after being only three hours flying distance from home and now coming about 16,000 miles instead! Also our party included the Naval Attaché in Helsingfors; also was caught and who had flown and trained to Cairo via Leningrad, Moscow, Odessa, Bucharest, Bulgaria, Istanbul, Ankara, Iraq, Syria and Palestine, after many adventures.

Most comfortable seats on plane, easily set to any angle. Flying due south along course of Nile—fascinating and pretty from above. Quite cool atmosphere—first time for two months. Breakfast served at 7 a.m. Each day to have breakfast, elevenses, lunch and tea on plane and dinner on terra firma.

Came down for refuelling on Nile at Wadi Halfa and later after rising to 10,000 ft. passed over junction of Blue Nile and White Nile—difference in colour very noticeable from air. Landed at Khartoum on White Nile. Drove across desert to Hotel on Blue Nile. Wonderful mirages of water, palm trees and buildings all the way across desert. Seen many mirages before, but not so amazing as these. Beautiful hotel. Changed to linen suit and went for walk with naval attache to small zoo and along the Nile and back to hotel for long drinks and dinner. Heard Prime Minister's speech from London on wireless—very clear !

July 15*th*.—Drove across desert in pitch dark for eight miles to airport, without any visible landmarks and no lights — wonderful driving. In the air at dawn. During day came down at Malakal, S. Sudan, which Italians had recently bombed, at Juba, Uganda, and at Port Bell on Lake Victoria, and each time had trip on launch or walk on shore. Many natives about on banks, wearing just strings of beads. On rising from Port Bell—marvellous view of Lake Victoria (largest in world) with its hundreds of islands at its north end. Crossed equator, and all six in our saloon had drinks to celebrate it. Came down at Kisumu, Kenya, on east side of Lake Victoria. This is 3,700 feet up, and so is comparatively cool, in spite of being practically on equator. Very comfortable hotel, and all servants barefooted—even in dining room, but very efficient and attentive. Had long walk round Kisumu. Very pretty residential quarter with many flowering trees. Many large shops in main street, nearly all Indian, who form about half the population. After dinner heard London news—very clear—also Gardiner's running commentary on the air battle over Dover—sounded like a football match !

July 16*th*.—Passed over green area, with many little native homesteads and villages with all the huts the small round shape with rush roofs — all looking exactly like mushrooms from above, but varying a little more in the general lay-out of the compound, than those seen yesterday in Uganda. Here in Kenya, people apparently have more initiative, but have always one large hut, two or more smaller ones all in one compound, and another compound for animals, and all surrounded by ring or fence of some sort apparently as protection from wild animals. Further west no ring or fence was noticed, as no wild animals presumably. Later passed over many great mountain ranges with wonderful scenery and beautiful cloud affects.

Started breakfast this morning with mangoes, paw-paw and fresh pineapple. Passed just east of Mount Kilimanjaro, on the border of Kenya and Tanganika. Had splendid view of this amazing mountain which is the highest in Africa and the third highest in the world (about 20,000 ft.) Its peak is flat and snow-capped, and it rises straight out of the flat plain as a symmetrical cone. Plenty of impenetrable jungle in patches in the swampy areas. Very cold in flight this morning and had to cover up with rugs.

Refuelled at Mombassa, Kenya, and then at once out over the Indian ocean, and passing over a liner bound for India and then over the Island of Zanzibar, refuelled again at Dar es Salam. Passed over the Delta of River Rafli, Tanganyika, and saw the German ship *Konisburg* which was hunted and disabled here. It must have been very difficult in the hundreds of miles of deep waterways of this Delta. Flew over several other Deltas of various rivers, and it is a wonderful sight from above, the many rivers making hundreds of flat islands. After refuelling once more at Lindi, we came down for the night at Mozambique, Portuguese East Africa, and were " put up " at the Imperial Airways Houseboat, which is a very comfortable concern and everything excellently run with black servants of course, but very efficient. Early bed.

July 17*th*.—Three-and-a-half hours flying in pitch dark and slept most of it. Very cold and glad I had put on more clothing. After coming down at Beira (Portuguese E.A.) passed over hundreds of miles of wild animal country where large herds sometimes seen. We were unlucky and only saw three elephants, several herds of wild cattle, many ostriches and many smaller animals running helter-skelter as we approached. We were then flying only about 300 ft. up. Refuelled again at Lorenzo Marques (Portuguese E.A.) and then headed for Durban over Swaiziland. Last hour sea again and flying very low only few feet above water to avoid strong head wind. Landed Durban. After many formalities on landing, just time to catch train with sleepers for Johannesburg. No time to look round Durban. The hustle was to catch the fast train tomorrow for Cape Town and then pick up a ship leaving next day. The alternative was waiting in Durban for another and being in United Kingdom at least a week later. Some glorious scenery between Durban and Johannesburg.

Later.—Slept well. Very cold this morning —6,000 ft. up and approaching Johannesburg—winter down here, of course, and thick frost on carriage windows, in spite of heat on inside. What a change from a few days ago. All meals on train excellent, and far better than on any English railway and about two-thirds the price.

Arrived Johannesburg 10 a.m. Hired large car with guide, and made tour of city as we had two hours to spare. Amongst other sights we went to top of Escombe electric building of 27 storeys to get birds-eye view of city, which seems to be completely surrounded by the mighty heaps from the gold mines. The University buildings and grounds are very fine—1,200 students.

Left Johannesburg 12.30 on the De Luxe train. This meant a two guinea supplement to our tickets, but it was the best two guineas' worth I have ever had. It is supposed to be the finest train in the world—very large compartments and dining saloon ; also large lounge and cocktail bar, and two shower baths to each carriage, to say nothing of the very comfortable beds with their pale blue sheets. Passed all day through the flat country of the Veldt. For many miles large white trumpet lilies growing all along the side of the railway.

Later. — Slept well and up at 6.30 a.m. About 10 a.m. almost suddenly came into the mountainous country and for next three hours passed through most fascinating scenery with snow caps here and there and varying with every half minute as the line went round the constant very sharp curves. Scenery reminds me very much of the rail journey from Dubrovnick to Sarajevo in Jugo-Slavia with its rugged and barren rocky mountains.

Arrived Cape Town 2.15 p.m. Four of us took taxi round town on way to docks. Table mountain top covered in cloud. Usual and multiple formalities at docks *re* money, customs, passports, etc., and just time to get on board. Good square cabin with real bed and wardrobe. Only 11 first-class passengers on board and room for 370—so we can spread ourselves.

Later.—Just read in Reuter's wireless news that there is a German armed raider in Atlantic which has sunk two ships. Hoping for best as we are now steaming for mid-Atlantic. Also news of the Luftwaffe going hard for our ports, but we refuse to be perturbed at present.

Later (Sunday).—Good short service at 10 a.m. in main saloon and taken by the Captain, but thought hymns rather inappropriate. One would have thought that we had already been torpedoed, and were waiting to be rescued ! Am at Captain's table with the naval attache, and the only two ladies in our party. One of these latter is an important South African living in London, who has just told us that the people generally in S.A. are most anxious to have evacuated children from Great Britain, and that many thousands have already volunteered, at their own expense, to have children in their own homes and keep them and educate them in same standard as at home. Also this same lady tells us that German propaganda is *very* active in S.A. and doing enormous harm.

Later.—Getting near tropics now and very hot in sun. All usual games now in full swing, but it is a lazy life and our little party of about ten foregather before every lunch and dinner for long or short drinks and small sausages, etc., just to raise an appetite. Meals are all wonderful and no restrictions, though I gather the outward voyage is rationed.

Later.—Early this morning saw two large whales about half mile away continually rising and spurting huge water spouts in typical whalish fashion. Enormous numbers of flying fish in these parts. They are most interesting to watch and often fly 300 or 400 yards.

Later.—We had our first real scare early this morning. All the alarm bells went at 3.45 a.m. and pitch dark of course, and up we all had to get and dash to the upper saloon—our concentration point—with what belongings we wished to take with us if possible, plus lifebelts, and there we waited, a motley looking crew in every conceivable kind of garb, and all with as much sangfroid as we could muster, till 4.45 a.m. Some days ago after a practice alarm, I had made a point, in case of emergency, of putting exactly ready what I intended to put on with certain valuables, etc., already in the pockets.

What actually happened was that a searchlight had picked us up about 2 a.m. and we put on two or three more knots to try and keep away, but the other ship was gaining on us all the time, but gave no signal. About 3.30 a.m. she sent two star shells at us to try and get a silhouette, but they felt short. Our captain then sent out an S.O.S. saying " Being chased by German raider," and gave his position, and called us all up to our boat stations. Later the other ship when close enough signalled by light, " We are British man-of-war, who are you ? " We signalled back by light. The man-of-war then replied " cancel your S.O.S. Sorry if we disturbed you." We were then all sent back to bed. The unfortunate thing is that sending out the S.O.S. by wireless has given our position away to all and sundry, including the German raider known to be in these parts. We crossed the equator about midnight last night.

Later.—Reuter's news tells us this morning that the German raider was tackled by the *Alacantra* in the South Atlantic. So we are free from that one, but she could not have been very far away from us. We have ten men now permanently on the look out, day and night, in various parts of the ship for the spotting of submarines and aircraft, and they are relieved every hour. Also about half the crew very busy lately with A.R.P. work—dealing with incendiary bombs and with fire drill with hoses all over the ship. Also lifeboats and their equipment overhauled every other day and the ship's doctor is busy with all the first aid apparatus. So nothing is left to chance.

Later.—Our ship's wireless early yesterday morning picked up three separate S.O.S. from three different ships torpedoed just at the spot we are making for—so the real excitement is apparently just about to begin.

Later.—Two more S.O.S. picked up last night from ships torpedoed a few hundred miles ahead of us directly in our course, so it is an anxious time for all those on the watch, and every available officer is on duty.

There was a concert in the men's quarters last night and to which all our party went. During the evening, we felt the ship give a mighty sharp turn and with great throbbing of engines, but we all took it to be just another zig-zag. But we learnt later that we had suddenly sighted another ship, and being pitch dark of course, it was fairly close, and so we turned completely round in as short a circle as possible and hared off straight in the opposite direction—just in case!

Later.—Last night was looked upon as our most critical night, but all were cheery and we kept up a sing-song in the lounge until well after midnight, and then slept peacefully.

This morning we sighted the Coast—but we were then passing through several miles of large patches of oil, an ominous sign of recent happenings in these parts.

Horribly cold to-day and have all available clothing on. Winter at the Cape seems infinitely preferable to summer around Britain.

Anchored about 8 p.m. for the night. The captain told me this morning that for the previous 24 hours he did not know for certain where he was, as being misty, there was no horizon and no sum. So he has made a very good shot.

Later.—As we came in yesterday we passed one large tanker at anchor with a huge hole in her side, but she had come in under her own steam—probably one of those from which we picked up the S.O.S. And this morning another large ship came in and passed us with an enormous hole right through her bows on the water line, and she was torpedoed in our course of yesterday. So we missed that all right!

Left our anchorage and landed at 6 p.m., and after a farewell cocktail party and dinner, caught the train for London.

It was an extraordinary thing the number of Guy's men, both medical and dental that I met on this trip, and it does seem that there is a more roaming spirit amongst Guy's men rather than from other hospitals. To finish up with, the ship's doctor was a fellow student of my own, Dr. P. H. Ward, and who in his early days was a pioneer in the medical world up country in Rhodesia. Also a R.A.F. medical officer on board was a Guy's man—so we all had many tales to tell. Whilst on the plane, I had made a list of Guy's men that I knew in Durban, Johannesburg and Cape Town, intending to ring them up if I had time, but as bad luck had it, there were no halts in any of these places, and it was my one regret during this trip, that I was unable to see any one of them.

A Case of Ectopic Testicle

THIS case was seen at Pembury Hospital and is reproduced by kind permission of Mr. Houston, M.S., F.R.C.S.

Mr. ——, aged 17 years, first noticed a firm painless swelling about the size of a walnut in his left groin on October 11th, 1940. He was admitted to Guy's under Mr. Brock on the 12th, and the lump diagnosed as a subcutaneous ectopic testicle. He was then transferred to Pembury Hospital for surgical treatment, and was admitted under Mr. Houston on 5th Nov., 1940.

On examination the patient was seen to be of slim build, 6 ft. 4 in. in height, and with a rather high-pitched speaking voice.

Examination of the abdomen showed an old scar in the right groin, which the patient said was the result of herniotomy at the age of six months. The scrotum was found to be small and completely empty, and it was wondered if the right testicle had been removed during that "herniotomy."

The left groin showed a firm, non-fluctuating, painless swelling, about the size of a walnut, situated at the position of the external ring. There was no impulse on coughing.

Operation was postponed for three weeks because the patient developed streptococcal infection of the throst, but was eventually performed on December 3rd by Mr. Houston.

A left oblique skin incision was made, 6 in. long and 1 in. above and parallel to Poupart's ligament. This was continued deeply on to the inguinal canal, which when opened was found to contain an obstructed hernia of greater omentum, the obstructed portion closely simulating in size and shape a small immature testicle.

The hernial sac consisted of the patent processus vaginalis with the strands of the gubernæulum testis in its walls. Downward exploration of the sac enabled three classical attachments of the gubernacuaum to be demonstrated :—

1. Laterally, the upper part of Poupart's ligament.

2. Downwards, in the direction of the saphenous opening.

3. Medially, towards the pubic tubercle, in the line of the canal.

The prolongations of the sac were detached and the whole sac brought up into the wound preparatory to excision, the herniated portion of greater omentum being returned to the peritoneal cavity.

The sac was excised and the search for the testicle continued. It was found lying lateral to the neck of the sac, extraperitoneally, near the position of the internal ring. Its position was considered to be as good as possible under the circumstances, and consequently was left where it was found.

The neck of the sac was then tied off and sutured to the deep surface of the conjoined tendon, the abdominal muscles repaired, and the skin incision closed.

JAMES BAKER.
P. T. E. BROWN.

Review

Principal Drugs. By A. L. MORTON. Tenth Edition, 1941. Published by Faber & Faber. Pp. 109. *Price* 2*s.* 6*d.*

THE sole purpose of this little book (it is 5 in. by 3½ in.), says the authoress in her preface, is to enable student nurses to satisfy their curiosity about drugs given to their patients. It will certainly succeed in this purpose. All the commonly used drugs and many which are seldom used, are listed alphabetically, a short description of each is given, and its principal indications mentioned. A list is given, as well, of the medical terms commonly used in therapeutics. This book should prove as popular as previous editions.

M. L.

Hospital Information, etc.

Pass List

ROYAL COLLEGE OF PHYSICIANS.

The following Guy's men have been elected Fellows :

Montague Maizels, M.D.
F. A. Knott, M.D.
N. S. Plummer, M.D.
G. W. Goodhart.

Papers by Guy's Men

Forgacs, P., and another. Cerebral Symptoms occurring during Sulphapyridine Treatment of Meningococcal Meningitis. *Brit. Med. J.*, 1941, i, 772.

Douthwaite, A. H. Rheumatic Disorders. *Medical Annual*, 1941, 327.

——— Rheumatoid Arthritis. *Ibid.*, 330.

Neustatter, W. Lindesay. Some War-time Psychological Problems in Children. *Pract.*, 1041, 146, 320.

Ogilvie, W. H. Wounds of the Knee Joint. *Lancet*, 1941, i, 471.

Sarginson, J. H. A Case of Implantation. *Brit. Dent. J.*, 1941, **70**, 406.

Barber, Hugh, and another. A Fatal Case of Myocardial Contusion. *Brit. Heart J.*, 1941, **3**, 127.

Cameron, H. C. Fifty Years' Progress in Pædiatrics. *Clin. J.*, 1941, **70**, 141.

Casualties in the Medical and Dental Services

IVE.—Missing in March, 1941, Middle East Forces, Lieutenant Oliver Ive, R.A.M.C., of Highgate, London.

PEACOCK.—On May 24th, 1941, in H.M.S. *Hood*, Surgeon-Lieutenant (D) John E. G. Peacock, only son of Dr. and Mrs. Peacock, of Ovingdean, Brighton, formerly of Blackheath.

STEBBINGS, Hedley Peter, in May, 1941, with Middle East Forces, son of Mr. and Mrs. H. V. Stebbings.

Births

KELSEY.—On May 21st, 1941, at the Avenue Nursing Home, Cheam, to Maureen, wife of Captain H. M. Kelsey, R.A.M.C., of Rudgwick, Sussex—a daughter.

SAWYER.—On May 24th, 1941, to Phyllis (née Taylor), wife of George Clayfield Sawyer, F.R.C.S. Eng., 40, Pangbourne Drive, Stanmore —a son.

SPALDING.—On May 27th, at Farnborough Hospital, Kent, to Katherine (née Davies), wife of J. E. Spalding, M.S., F.R.C.S.—a daughter.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV 28th *June* 1941 *Number* 1381

PASSIM

THE advent of flaming June, delayed well into the end of the month, has coincided with nights of incredible shortness. These nights have remained singularly free from the drone of 'planes or the whistle of bombs, but sleep under black-out conditions has become almost unattainable except to those who have very sensibly turned the roof into a dormitory. Our patients, as they are evacuated to the Base Hospitals, carry with them many a groan of envy from the staff that stays behind. The limited pleasures of summer in the Borough have not been increased for us by the almost simultaneous arrival of the demolition squads; these gentlemen have engaged upon the task of levelling the upper two storeys of the burnt-out Counting House, necessitated by the dangerous state of the unsupported walls. The resultant clouds of dust have rivalled the Hospital chimney in their covering and penetrating capacities. It is fashionable to-day to discuss and explore the future of medicine after the war, both as regards the profession in general and also our own hospital in particular. In this connection it is significant that at the same moment that our sorrow must be recorded at the demolition of this block, such an architectural feature of the hospital buildings, a new ward has been opened for patients in a building of entirely different design. An article describing the York Clinic building and the purposes for which it has been erected appears in this issue of the *Gazette*. The block which stands adjacent to the new Pathology building and to the new Nurses' Home has but recently reached completion. It is strongly constructed, and, with a reputedly incendiary-proof roof, is as safe a building as could be found in this district. Although the York Clinic is a distinct organisation intended for a specific purpose and with its own committee of management, with great generosity the basement has already been made available as a ward for medical patients, whilst the staff of the Counting House have found emergency accommodation on the ground floor. As a further example of the expansion of our hospital comes the announcement that our country annexe, the Wildernesse, is now completed and will be opened on the 30th June for in-patients. An ambulance service to and from Guy's will enable the fullest use to be made of the facilities for both medical and surgical treatment that will be provided. The reaction of our Borough patients to treatment in the country have already become stabilised in virtue of the use that has been made of the sector base hospitals, and they have been on the whole extremely favourable. The advantages to be gained from such treatment in these days of black-out, blitz and summer heat cannot be gainsaid; it is to be hoped that the possibilities of treatment and convalescence in the wide open spaces will also be utilised to the full.

THE rationing of essential foodstuffs combined with the shortage and high prices of home-grown produce have together rendered the provision of an adequate and varied dietary for our hospital patients a matter of extreme difficulty. "Digging for victory" has become a prominent feature of our national life; a perusal of recent sector letters would seem to indicate that horticulture is rapidly developing into an important adjunct to hospital life. Any excess of the common vegetables and fruits over individual requirements that may result from such endeavour would obviously prove a valuable addition to the hospital dietary; the Guild of ex-Patients has already launched a scheme, under the slogan "Grow Greens for Guy's," inviting the gardeners and allotment holders amongst its members to present gifts of vegetables and fruit to the hospital. It seems certain that extension of this invitation to all the Guy's men throughout the country would result in a welcome and valuable response.

◆

THE announcement that the swimming-bath has been reopened for bathing at certain hours has come as a very welcome surprise; the mention made in this announcement that the primary use of the bath must continue as that of a reservoir of water serves as a reminder of the services to the hospital of that grossly underpublicised department, the Works Department. Even in peace time the men were of necessity " jack of all trades," and were always on call to remedy any defect, from the breaking of a bulb to the bursting of a boiler. During the war their services have been immense; themselves the mainstay of the fire-fighting parties, they have maintained the essential services of the hospital, pumping water from well to reservoirs, and from reservoirs to tanks, as well as pumping it out of the engine-room when the district was almost flooded out after neighbouring fires. The hospital has been provided with electricity and with water at times when the Borough has been sadly lacking in these necessities. The standard of their work has also been maintained at the highest pitch of efficiency, as is obvious if the details of the construction of the wooden staircase in Hunt's House are studied.

Dyspnœa

A Clinical Lecture delivered at Guy's Hospital on Friday, May 23rd, by John A. Ryle, Esq., M.D.

I.

GENTLEMEN,—A few weeks ago a man aged 45 was referred to us at Out-patients with shortness of breath on exertion as his main or presenting symptom. He had been troubled with a cough since November of last year, but, in spite of a recent improvement in the cough, with which there was but little expectoration, the dyspnœa remained and incapacitated him for work. He was a lorry-driver and a man of good type with a wife and family to support. He had had winter coughs in recent years, but these had never before kept him from work or been associated with breathlessness. While he was undressing we set ourselves, in the customary way, to an examination of the symptoms in the light of the history, considering how they might best be explained and what the examination might be expected to reveal, for at every stage of a diagnosis possibilities and probabilities should be turning over in the mind, and this one supported or that one rejected by the evidence as it comes to hand. We argued, on the strength of the winter coughs and later breathlessness, that he might have a developing emphysema, digressing to remind ourselves that stretching of the alveolar walls, reduction of the capillary bed, an increased pulmonary blood-pressure, and finally a right heart over-stress was the usually accepted basis for emphysematous dyspnœa. Nevertheless, this explanation was not fully satisfying, for the dyspnœa was rather severe and of recent and somewhat abrupt onset, he was perhaps on the young side for such a condition and not of the usual type and build; there had been no improvement in the dyspnœa with the lessening of the cough. Perhaps something in his appearance prompted us before we began the physical examination or dissatisfaction with possibility number one had switched our thoughts to possibility number two, but in any case we agreed that we must also consider organic heart disease, unmasked by the stress of the winter cough and the passage of time, as consistent with the history obtained.

As soon as we had him lying on the couch before us in a good light we noticed overfilling of the neck veins and a slight cyanotic tinge to the lips which had not been apparent as we took his story at the table. Examination revealed in turn considerable enlargement of the heart to the left, a diastolic thrill and a low-pitched rumbling diastolic murmur just internal to the impulse. We queried, too, a faint aortic diastolic murmur, but there was no water-hammer quality to the pulse and the blood pressure was within normal limits. These findings sent us back to the history. He had had no rheumatic fever in childhood, but had been laid up with rheumatism at the age of thirty. Thus our second possibility became at once more than a probability and we entered his diagnosis on his letter as " Mitral Stenosis following rheumatic carditis." He probably has a slight aortic reflux in addition to explain the rather pronounced left ventricular hypertrophy. Patients with mitral stenosis are notably liable to winter coughs and, once developed, such coughs throw an extra strain upon the heart. History, symptoms and signs now clearly fitted and buttressed one another, and signs, as they often should do, had sent us back to discover an important historical point bearing on ætiology. The case was one of effort dyspnœa and, in the absence of gross lung disease or anæmia, this should generally suggest the presence of cardiac disease.

II.

I have related the main facts of this case, which some of you may remember, in order to provide a text for a more general discourse on breathlessness. After pain dyspnœa may well be regarded as the most important of all physical symptoms. I want you to consider the ways in which it may be studied. But first of all let me remind you of some clinical terms which it may be necessary to employ. By dyspnœa we understand difficult or distressful breathing; by tachypnœa, rapid breathing; by bradypnœa, slow breathing; by apnœa, no breathing or cessation of breathing; by hyperpnœa, deep breathing; and by orthopnœa, upright breathing—that is to say, inability to breathe comfortably except in the upright position. In disease breathing may thus be altered in respect of comfort, rate and depth, but its rhythm can also be disturbed. Thus a dyspnœa may be expiratory or inspiratory and there is also the " inverted rhythm " of pneumonic breathing. Cheyne-Stokes respiration provides yet another example of altered rhythm.

All of these modifications or departures from the normal have diagnostic significance, so the number of observations which we may need to make on the act of breathing in a given case is quite considerable. How might we arrange to study the disturbances of breathing which, for convenience, I have here included under the general heading of dyspnœa? We might do so by the experimental approach, reproducing dyspnœa in healthy men or in animals by various expedients and studying, by clinical, radiological and physiological techniques, the phenomena produced. We might then apply the same methods to the dyspnœas of disease. Studies of vital capacity and quantitative analyses of samples of alveolar air and estimations of the blood gases could be employed. In the process we should learn much but we would still not be studying some important features of those particular disturbances which diseases cause, which vary characteristically one from another, and which have, as we shall see, such high diagnostic significance. Most of you are going to be clinicians and will have to rely on clinical methods. Let us therefore content ourselves for the moment with such studies as can be made by any careful observer at the bedside or in the consulting-room. How may dyspnœa be studied in these places? The answer is—just as we studied the case of our lorry-driver in Out-patients: by obtaining a history from the patient of the type, degree and circumstances of his breathlessness and of any associated symptoms; by observing for ourselves, whenever possible, the particular characters of the respiratory symptoms and signs, such as the rate and rhythm and depth of the respirations and the presence or absence of stridor, wheezing and prolongation of inspiration or expiration; by observing and investigating more closely attendant phenomena such as cough and expectoration, cyanosis or pallor; and, finally, by discovering physical signs—whether pulmonary, bronchial, laryngeal, cardiovascular, hæmic or nervous—of the pathological condition underlying the main or presenting symptom. Now it would scarcely be possible for the text-books in the case of each disease to enter into details about all these observations, but it is open to any one of you to make such observations and then, with your background of physiological and pathological understanding, to interpret and make use of them.

To systematise our studies it would not be unreasonable to classify the familiar dyspnœas into main categories based on the seat of origin or nature of an essential pathological change or disturbance. Thus we could separate obstructive dyspnœas (laryngeal, bronchial or bronchiolar); pulmonary dyspnœas (pneumonic, emphysematous or fibrotic); cardiac dyspnœas (right and left ventricular); anæmic dyspnœas; central or chemical dyspnœas (e.g., diabetic air-hunger and Cheyne-Stokes breathing); and hysterical dyspnœas (tachypnœa), some of these categories indicating a morbid anatomical, some a morbid physiological change and some both. While allowing that common factors, namely oxygen-lack and motor disturbance, play some part in most of these we should also find in respect of each of them definitive peculiarities of breathing of very constant kind and clinical value.

III.

As it would be impossible to do justice to the many clinical varieties of dyspnœa in the course of a single lecture, I propose to select for illustration those varieties which accompany laryngeal obstruction, bronchial asthma, lobar pneumonia, left ventricular failure, Cheyne-Stokes breathing and hysterical tachypnœa. When possible I shall try to imitate for you the disturbance in question.

Laryngeal obstruction in children is due usually either to diphtheria or to the more benign spasmodic and catarrhal conditions known to the laity as " croup." The development of the latter may have been preceded by a cold. The larynx in small children and babes has such a narrow lumen that it is small wonder that it is more readily obstructed than in adults. The voice or character of the cry may have been altered and have become husky or almost aphonic during the day and then, perhaps, at nightfall, as though to add to maternal alarm, an inspiratory stridor becomes apparent. At first the child may be unhappy and restless, but if the obstruction becomes severe, as in diphtheria, it will lie still and conserve its energies for the inspiratory effort, each act of which is coupled with a rasping or crowing sound. The alæ nasi dilate and the sign of " sucking in " is apparent when the chest is exposed, being best seen above the clavicles and along the attachment of the diaphragm, points where the chest wall opposes a less rigid resistance. If you will try to inspire with your glottis closed you will feel a definite indrawing both of the supraclavicular fossæ and the diaphragmatic attachments. In laryngeal obstruction the respiration rate is not greatly increased as, for instance, we see it increased in cases of pneumonia, owing to the long-drawn effort of inspiration. Cough, if present, is dry and brassy or aphonic. Benigh " croup " tends to start abruptly, to be noisy, and to last for hours only or at most for a day or two. Diphtheritic laryngitis is more insidious, quieter and more progressive; pallor and lividity may supervene and tracheotomy may be necessary or death follow.

Asthmatic attacks are, as you know, paroxysmal, intermittent, recurrent and may last from minutes or hours to as much, occasionally, as days. They are very frequently nocturnal and, as with other spasmodic episodes, tend to wake their victims in the early hours of the morning. Between attacks there may be perfect health. The patient's complaint is of breathlessness with wheezing of a squeaking or musical kind. He likes to get up and sit in a chair or by a window and sometimes to fix his shoulder girdle by resting the arms on some convenient object. The shoulders are raised and all the accessory muscles of respiration come into play. The chest feels to the patient and appears to the physician overfilled, as indeed it is. The difficulty is expiratory and expiration is much prolonged. In severe attacks there may be cyanosis. During the attack percussion shows diminution or absence of cardiac and liver dulness owing to distension of the alveoli. Sibilant rhonchi, expiratory in time, are audible all over both lungs. Owing to the slow and laborious act of expulsion of the air from the lungs the rate, as in laryngeal obstruction, but for the opposite reason, cannot be so greatly accelerated as it is in the non-obstructive dyspnœas. At the end of an attack a very small amount of viscid coagulated mucus may be expelled, but coughing may be absent throughout the attack.

In *lobar pneumonia* there is, as you all know, dyspnœa and orthopnœa, and there may be sharp local pain accompanying the act of breathing or coughing owing to the associated pleurisy, especially in the early phase of the disease. In an adult the respirations may rise to 30 or 40 per minute or more ; in an infant they may exceed 70. The rhythm is inverted. The excursions of the chest are shallow and often accompanied by a short grunt in expectoration. The grunt is caused by a partial closure of the glottis as though to " hold up " the expiratory movement of the chest and lessen pleuritic pain. The alæ nasi are in action. In graver cases and later stages varying shades of cyanosis replace the initial flush of fever. The cough is short, dry, and often painful. The sputum is scanty, viscid and rusty.

Unlike right heart failure, which is of gradual onset, passing from a stage of effort-dyspnœa to a later persisting dyspnœa with orthopnœa at rest, *failure of the left ventricle* is ushered in suddenly and commonly at night by acute and urgent dyspnœa of an alarming kind alike to the patient and observer. There is great embarrassment of breathing, with orthopnœa, activity of the accessory muscles and a grey pallor rather than blue cyanosis, and in a grave attack copious frothy serous fluid is with difficulty expelled, rather than actively coughed, from the chest which appears fixed in the inspiratory position. For this reason the excursions of the chest are shallow. There is generalised pulmonary œdema and scattered râles are widely audible. Examination and history will reveal the underlying pathology which is usually hyperpiesia, chronic nephritis or aortic regurgitation, all conditions liable to throw a strain upon the left heart. Certain less dramatic but still very distressing attacks of nocturnal dyspnœa without evident lung œdema, which also procliam or threaten left ventricular failure, have been called " cardiac asthma," a term better abandoned since it does not sufficiently define the nature of the attacks and confusion with bronchial asthma is to be avoided. The picture of acute left ventricular failure is superficially identical with that seen in phosgene poisoning, but here the œdema is probably due to direct damage to the alveolar walls.

Two Guy's men — my teacher, Professor Pembrey, and your late teacher, Dr. Poulton— were particularly interested in the curious disturbance of respiratory rhythm which is named after the great Dublin physicians, William Stokes and John Cheyne, who first described it. Largely on the strength of studies made at Guy's it is concluded that *Cheyne-Stokes rhythm* accompanies changes of excitability in the medullary centres due to a relative anoxia. It is chiefly encountered in the later arteriosclerotic stages of hyperpiesia and in chronic renal disease, and it commonly portends myocardial failure. It is not confined to bed-ridden patients, and I have seen it several times in the consulting room. The striking features are phases of gradually deepening respiration in *crescendo* fashion and a following *diminuendo* phase alternating with apnœic pauses which sometimes seem to endure so long that you wonder whether the patient is ever going to breathe again. The rate may increase in the hyperpnœic phase. The hyperpnœa, it is supposed, washes out the CO_2 and apnœa ensues until it reaccumulates sufficiently to stimulate the centre once more. The patient, although his capacity for effort may be limited by dyspnœa, does not appear to be consciously breathless during his exhibition of Cheyne-Stokes rhythm at rest. He thus presents a respiratory arrhythmia rather than a true dyspnœa. Cheyne-Stokes rhythm can occur normally in sleep.

Occasionally we meet in practice a patient, almost always a young woman, who suffers from what she calls " breathless attacks," attacks, however, which we should more correctly describe as tachypnœa. Such a patient may breathe at 40 to the minute, rather like a panting dog, but without outward distress, wheeze, grunt, change of colour or cough and without precipitating physical cause. The physical examination is entirely negative, revealing no signs of cardiac or lung disease or anæmia. The attacks may develop at rest. Sometimes tetany, " overbreathing tetany " as it is called, complicates the attack. Washing out of the CO_2 from the lungs is regarded as providing the underlying chemical basis for this tetany. Such a patient is usually of unstable emotional type. The panting habit should rarely deceive the physician and can sometimes be stopped by persuasion at a single sitting.

IV.

Called to a case of dyspnæa, therefore, we do well to sit and watch the patient for a few minutes before we make any examination, and to listen while we watch, noting the presence or absence of stridor, wheeze, grunt or cough and the character of these when present, recording the respiration rate and the presence or absence of cyanosis or activation of the accessory muscles. Signs visible from the foot of the bed may be as useful as those elicited by more precise methods. As experience grows we find ourselves more and more frequently attaching the appropriate diagnostic label on the basis of those manifestations which I have briefly tried to sketch for you.

Confronted by a patient who is well enough to visit us in the consulting room we should again sit and listen, but this time to his or her description of symptoms helped out with questions and promptings. Are you short of breath only on exertion or at rest too? Are the attacks more by day or night? Is your breathing quiet or noisy? Do you cough? Is there sputum and, if so, what is it like and what is its amount? On such simple enquiries a shrewd suspicion or even an accurate decision can often be based.

And, finally, as I reminded you at the beginning of this lecture, the concluding opinion should, whenever possible, require symptoms to fit history and signs to conform with both. A child with nocturnal dyspnœa and wheezing but no physical signs between attacks is likely to have asthma. A man of 60 with nocturnal dyspnœa and a high blood-pressure is likely to have left ventricular hypertrophy and threatening failure. A woman of 30 with deep-coloured lips and a gradual onset of an effort dyspnœa is likely to have mitral stenosis. A pale woman of 30 with effort dyspnœa is likely to have anæmia. Both may have murmurs but they will differ in character. A thin young man with effort dyspnœa and a loose cough is likely to have pulmonary tuberculosis. An elderly deep-chested man with a history of many years of winter bronchitis is likely to have emphysema. The suspicions aroused in each case during the interrogation help to concentrate the examination in the right place or to conduct the further interrogation along appropriate lines.

Eyes without the microscope, ears without the stethoscope, wits without the help of chemistry or radiology—not that we should deny ourselves the proper use of these—can often carry us a long way.

Notice

On Monday, June 30th, in the B.B.C. programme for overseas, at 4.15 p.m., the feature, " Stones Cry Out," will be centred around Guy's Hospital.

Guy's Hospital Gazette

A Journal of Hospital News, Medicine, Surgery and Dentistry.

Published in alternate Saturdays. Price 9d.
Marriage, Birth and Death announcements inserted free.

The York Clinic for Psychological Medicine

By R. D. Gillespie, M.D., Physician for Psychological Medicine

THE York Clinic stands for something new in British medicine. It is the first clinic of its type in this country to be erected within the precincts of a general hospital and to form an inseparable part of a great teaching school. It has been built to receive psychological illnesses of all kinds, from the mildest condition commonly called " nerves " to the more severe illnesses involving mental alienation, but excluding all such as require certification.

The reasons that actuated the donors in giving the necessary funds for the building of such a clinic have concerned the care and treatment of patients, the advancement of medical science, and the interests of medical education.

It was felt that persons suffering from mental ailments often wait undesirably long before submitting themselves to treatment, and that their reluctance would often be greatly diminished, and their delay consequently much less, if they knew that they could have all the necessary treatment at a general hospital, and that of the first rank, with no more formality about admission to the hospital than is involved in the case of any other type of illness. Moreover, all facilities for the investigation of the physical aspects of mental illness would automatically be close at hand; the accumulating evidence for the presumption of a physical basis of some kind for some of the more severe mental illnesses, is an additional indication of the need for ready access to facilities of that kind.

On the other hand, the much more definite evidence for psychological causes for many apparently physical illnesses, emphasises the advantage to a general hospital of including within its walls a clinic staffed and equipped for the investigation and treatment of the psychological aspects of ill-health in general. In fact, the inclusion within a general hospital of such a clinic is symbolic of the recent trend in medicine, away from a more or less rigid materialism back to a more truly scientific philosophy which recognises the interaction and even the interpenetrability of mind and matter in the genesis of ill-health.

The benefits are not likely to be confined, in view of those responsible for the clinic, to the patients actually treated there. The teaching of psychological medicine to the students of Guy's Hospital will be greatly expanded and intensified by access to a clinic with nearly all types of mental illness to an extent which is not possible under the usual conditions. Abroad, it has been customary even before the last war to include a psychiatric (literally " a mind healing ") clinic as in indispensable part of a first-class teaching school. The result of such an arrangement is that medical men make repeated contact with psychological illnesses as readily as they do with the problems of physical disease in the general wards, and so develop an interest and a sympathetic understanding that is much harder to acquire for anyone whose introduction to these problems comes much later, and in a more restricted way. The experience thus gained will be available in increasing measure for their patients, whatever branch of medicine they practise after qualification. Benefits of this sort are not likely to be confined to the practitioners of the future. The staff of such a clinic is bound to benefit from constant intercourse with colleagues in other branches of medicine, and vice versa. Nothing rusts the mind or narrows the outlook so much as a special study pursued in geographical and therefore often intellectual isolation from one's colleagues. " As iron sharpeneth iron, so a man sharpeneth the countenance of his friend."

The objects then are to extend all the benefits of modern medicine to patients suffering from any kind of psychological illness at the earliest moment, and on the other hand to give opportunities both to students and postgraduates for easy access to such illnesses at an early stage, so that the benefits will spread ultimately to an ever-widening circle of patients far beyond those that are admitted to the clinic itself.

The friendly co-operation and advice of the Chairman of the Board of Control, Sir Lawrence Brock, and of Sir Hubert Bond, both in regard to the objects of the clinic, and its design, have been freely afforded.

The building has been designed with several leading requirements in mind. The architects had to provide for the accommodation of several different types as well as degrees of illness, and this has been met by arranging for the type of case usually called " nerves," or to use the medical term, psycho-neurosis, to be accommodated on the first floor, with recreation space on the ground floor; the more ill patients, those who are mentally ill to an extent requiring closer care and observation, are accommodated on the second and third floors for male and female patients respectively; and those who are in any way disturbed, on the top floor, where their own recreation and outdoor space is provided especially for them.

Secondly, the majority of the patients will be ambulant and will require treatment over periods ranging from several weeks to several months; therefore the clinic becomes their home for the time being, and it is necessary to provide that each section within itself shall contain space for accommodation and recreation. Hence, in addition to the general recreation rooms on the ground floor (library, lounge, and occupation room), there is a gymnasium and dining room in the basement, and on the roof two glass-enclosed sections and one open section for games like deck tennis and badminton. There is a common sitting room on each floor, and in addition the corridors, on Lord Dawson's suggestion, have been constructed so wide as to allow them to be used as sitting and recreation rooms. The bedroom accommodation is for the greater part in the form of single rooms, but there are also a number of three bed wards containing cubicles. A doctor's room and a test room complete the accommodation on each floor.

There is a continuous bath for the sedative treatment of the more disturbed type of case installed in the top floor, and provision is made for another if required. Modern electrical methods of treatment of mental disease are also being provided for.

Since successful treatment of psychological illness of any kind depends on individual care and attention, the division of the clinic into small units, ranging from nine beds on the top floor to thirteen on the first floor is a considerable advantage.

It is intended to provide a liberal amount of medical staff to ensure maintenance of the principle of maximum individual care, and it is the intention to follow what has become routine practice in hospitals for this type of illness by having an occupations teacher on the staff.

The accommodation provided in the clinic has all these requirements in view. The donors have particularly in mind that research and efficiency in treatment tend to go hand in hand, and for this reason a considerable proportion of the space in the basement floor has been given over to a laboratory.

The clinic will be part of the Department of Psychological Medicine in the hospital, and will work in conjunction with the out-patients' department, and with the beds for psychiatric cases allotted by the Governors for some years past for this purpose in the general wards of the hospital, the medical staff, augmented for this purpose, being the same for the Clinic and the hospital.

The arrangements should facilitate consultations bearing on the psychological aspect of medicine in the general wards of the hospital and in the other out-patient departments. It has been shown that at least a sixth of the general medical out-patients are mainly or entirely psychological problems. It is not intended to suggest that such illnesses should be relegated entirely to the specialist's domain; the purpose is rather to diffuse a knowledge of psychological medicine throughout the other branches of medical practice. In addition, it is intended to develop and intensify the connection which has long existed between the Department of Psychological Medicine at Guy's Hospital on the one hand, and on the other hand a well-known hospital for the treatment of psychoneurotic and allied conditions, and one of the London County mental hospitals.

The needs of psychiatric patients are so varied that only a comprehensive organisation can do justice to the problems involved, whether in teaching about them or in taking care of them medically. While it is hoped to provide some free beds in the clinic it will be necessary to charge fees at rates varying with the capacity of the patient to pay, and so arrange that the income will be sufficient to make the clinic for the most part self-supporting.

(Reprinted by kind permission of the Editor of *The Hospital*.)

Sector News

Guy's Letter

THERE has recently been some rearrangement of the medical beds in the hospital. This change has been brought about by the opening of the basement of the York Clinic, which is now able to accommodate in separate wards seven beds for women and a further four for men to be used as an overflow from the ward in Shepherd's House. More important, there are six cots where, it is hoped, all children, whether medical or surgical, can be segregated.

It is sad to see the walls of the disembowelled part of the Front Quad. being pulled down. But safety dictates this necessity to defile the tombstone of what in life was so gracious and so gently dignified.

We are to sustain a sad loss. Next week Mr. Harley returns to Pembury, where he is more than well known already. The present condition of his feet will mean his being evacuated in a Green Line coach and trussed in Thomas's splints. Pomposo has our very best wishes both for keeping out of mischief in Kent and for his forthcoming Mastership examination. His place at Guy's is being taken by Mr. Eric Davies, until recently a House Surgeon here.

The recent fine spell has driven many of the residents of Nuffield House to sleeping on the roof. Dr. Erskine sleeps there, too, though, of course, in suitable isolation.

Rationing affects all. We are told it means the same to high and low, to rich and poor. However, we have reason to believe that gynnæcologists are affected professionally as well as inwardly. Last week, Gynæ Gib was about to perform a pelvic examination in a ward. He had scrubbed his hands, the screens were up, all was ready. With set expression he reached to the bowl for his gloves and, without relaxing a stern countenance, found instead a pound of butter and two or three smaller packets of margarine. But, then, the weather has been hot lately.

We were sorry to see Night Sister warded with a septic toe. It is felt that her work for what some say is the Ministry of Infirmation, and which leads her to all parts of the hospital, may be responsible for this. Nevertheless, we know tha with plenty of active exercise these conditions soon resolve.

There is a room above Out-patients which has been converted into a " museum of incidents,' a word which Nelson Burgess uses, roughly ten times in a full minute. He has never been heard to speak of an explosion, a direct hit or a land mine, for these are but incidents. Indeed, the whole war is a mere incident in Burgess's life, while he is an incident in everyone else's. Now this museum is extremely well set out and most interesting. Burgess is to be congratulated on collecting the specimens from far and wide and then mounting them. The collection should certainly find a place in the history of Guy's Hospital, and we hope that arrangements can be made for its being opened to inspection by all members of the hospital.

Those who read the papers in the medical journals will wonder, this week, whether all her alumni bear in mind the name of their great and famous hospital when they strive to see their vapourings in print.

R. T. H.

Pembury Letter

AFTER months of rain, low cloud, and petty blasphemy the sun once more shines down upon us and Pembury may be seen in all ts glory. The blooms of the horse-chestnut and rhododendrons are making a wonderful show, while the flower of the never-fading hues has blossomed out recently in a new shade of blue. Though many beds are now being used for growing vegetables (ask the Sister of any chronic ward), the irm bombrinudi (orthopodia rubra vera) still lourishes in such profusion that constant efforts are necessary to prevent it overrunning beds ntended for other varieties. In such weather the will to learn has its counter attractions and there have been unfavourable comments by a member of the senior staff on the attendance of members of the student body. Absence of the former, however, is greeted entirely favourably and has led to the remark : " No news is good news."

The pathology department was rather ruffled recently by a bottle of renal secretion which was sent there with a request for abnormalities and culture, and contained a large fly. We understand that this was reported as being abnormal, but whether culture was successful is not yet known. From our uncertain knowledge of the method of procreation of the fly we believe this must have failed.

Insects are, however, a painful subject in that part of the hospital. It is well known that beekeeping is not all honey, but our pathologist now feels that he has been severely stung over his hives.

It is with profound regret that we have just received the news of the sudden death of the Master, Mr. Partridge, who had only just returned to resume his duties after a severe operation. We feel sure that all who knew him and have now left will wish to join with us here in expressing to Mrs. Partridge our most sincere sympathies.

G. L. L. R.

Farnborough Letter

THROUGH the good offices of Professor Payling Wright the Farnborough section of the Medical School has been fortunate enough to have the opportunity of listening to a series of lectures on Applied Immunology by Dr. R. A. O'Brien. Dr. OBrien's admirable work in connection with this important subject is widely known, and we feel deeply grateful to him for coming to address so humble an audience and for the great trouble which he has taken in arranging practical classes on the various skin-tests. The lectures which he has already given have aroused great interest and we look forward to the remaining ones with eagerness.

It came as a surprise to most of us here to find, on opening our *Lancets*, that Mr. Gilford had furtively added the D.A. to the already imposing array of abbreviations which he can append to his name. If medal-ribbons were given for academic distinctions, Mr. Gilford could probably overcome the clothing restrictions by having a coat made of his.

A contingent of nurses is due to leave this week-end for the Wildernesse. From the accounts which we have heard of the new hospital their departure will be followed by many envious glances from those left behind—particularly any interested in golf.

V. C.

P.S.—We regret that in our last letter Mr. Reeves was erroneously referred to as Mr. Lee and Mr. Zerny masqueraded as Mr. Terry.

Orpington Letter

WITH many other locations Orpington has suffered from the tobacco shortage for the last week, and the medical staff, house-men and consultants alike have been seen making manifold, if fruitless, journeys to near-by emporia in quest of the satisfying weed.

Absence from this great anodyne makes us better appreciate its sweet properties, and brings to mind C. S. Calverly's " Ode to Tobacco " :—

" Thou who, when fears attack,
bidst them avaunt, and black
care at the horseman's back
perching, unseatest ;
Sweet when the morn is grey,
sweet when they've cleared away
lunch ; at the close of day
possibly sweetest."

The model railway, of which mention has been made before, has taken on the properties of a malignant growth, as Mr. Batchellor would have it, and now extends to another two walls, and the peace of the cool summer evenings have been rent by the jeers of derision or sighs of sympathy when Dr. Scott precipitates yet another " express fish " on to the floor.

We were happy to have two " old boys " with us on visits this week—Bucknall, who is about to receive his commission in the R.A.F., and Cox, resplendent in a *very new* uniform. Both paid us a call. Here we might well say that we are always pleased when our former colleagues come and see us. " A man, sir," said a somewhat better known Dr. Johnson, " should keep his friendships in constant repair."

B. D. J.

Correspondence

" Teaching "

To the Editor of the GAZETTE.

SIR,—In one of your recent numbers of the *Gazette* you published a letter upholding the personal method of teaching and spurning the modern tendency—that is, your correspondent said, to crowd medical students into a lecture theatre and ram words down their throats. May we, the undersigned, say how much we endorse that view, and how much we regret the appearance in Theatre I of a pen into which the Ward Clerks are crammed like criminals in the dock, whilst an operation is in progress.

May we point out that this portable horror could be very useful in helping a large firm to witness an operation. But with a small firm it is nothing but a nuisance, as the surgeon, or his assistant, invariably works with his back to the travelling contrivance on which we unfortunate ward clerks perch.

To take a more constructive point of view may we suggest three things :—(1) That the contraption may be moved to such a position that it provides a more useful view ; (2) that it be only voluntarily occupied by the ward clerks if their firm is operating ; (3) that extra spectators from other firms who may want to witness the operation may do so from this visitors' gallery only. Failing these, Mr. Editor, we may as well retire to another room and hear the surgeon's chit-chat through a loud-speaker for all the good it does us !

We suggest that to appreciate the finer points of an aseptic technique such as Lane's we must be able to get a near view so that we can see the part each instrument plays before it is removed ; also, from the gallery, it is only possible to see the genus —not the species of instrument employed !

The appearance of this dais (doubtless to elevate the humble) leads one to ask several rhetorical questions : " Has there been increased post-operative sepsis ? " or " Do we get in the way more than any other firm of ward clerks in the last decade ? " and " Has it not been the privilege of the surgical ward clerks for countless years to have the full freedom of the theatre ? " or " Is it that the Hospital is now being run with Prussian autocracy ? " If so, we do not appreciate it ; it is not as efficient as the old democratic method !

For whatever reason it is there we loathe and detest it. It is killing half the pleasure of ward clerking by removing, perhaps, the most interesting part of our instruction. We would be infinitely grateful to any person who would either trundle it out into the road in front of an Army convoy, or tie it in a knot and deposit it neatly in front of the donor's office.

We are,
Yours, etc.,

P. L. B.	J. A. K.	A. S.
H. F. H.	A. B.	J. W.
E. G. W.	N. D. K.	P. G. L.
R. F.	F. C.	G. R. Y.

Pembury Hospital,
Kent.

Prevention of Tetanus

To the Editor of the GAZETTE.

SIR,—I shall certainly be one of those who will feel it my " duty by personal example as well as by precept to spread its use (*i.e.*, tetanus toxoid inoculation) with all possible speed amongst the public " if I can be assured of its real value as an immunising agent. Dr. Douthwaite must give us that evidence if he wants us to be disciples. He must give us reliable evidence that human subjects inoculated against tetanus not only possess a high titre of antitetanus toxin in their blood, but that their nervous tissues are able to resist infection. It is well known that antiviral bodies in the blood do not protect the central nervous system against anterior poliomyelitis. I have summarised the evidence for this recently in the Guy's Hospital Reports.

The very fact that recently an edict went forth from the controller of the E.M.S. that tetanus antitoxin had to be given to patients whether they had been immunised or not and, if they are suffering from questionable wounds, makes it clear that too much faith must not be put in tetanus toxoid as a protective agent.

Patients with certain wounds obviously call for a dose of A.T.S., especially if the wound is to be untreated for any length of time or has of necessity been exposed to dirt, etc., for a long time, but I am equally convinced that other wounds, if they are treated hygienically, can be left to heal and no antitoxin given. Dangers such as anaphylactic shock, nerve palsies such as those of the deltoid, are real entities which must be taken into account. The problem, as I see it, is not as easy as my friend Dr. Douthwaite makes out, but perhaps he will be able to convince me.

Yours, etc.,
R. E. SMITH.

3, Horton Crescent,
Rugby.

" Tetanus "

To the Editor of the GAZETTE.

SIR,—I have read with interest Dr. Douthwaite's clinical lecture on tetanus in the current number of the *Gazette*. May I trespass on your space to say that, while I agree as to the value of the masterly monograph of Cole and Spooner written six years ago, I cannot but feel that too little attention has been paid to more recent work. I entirely disagree, as many others must, with the highbrow forecast given in the last paragraph that the mortality of tetanus will remain depressingly high.

On the other hand, I maintain that we have every reason to believe that the treatment I described two years ago will reduce the mortality to well below 20 per cent. and possibly far lower. My observations have since been confirmed by Dr. Bryant and others working in the Sudan, who reported the results of this treatment in the Transactions of the Royal Society of Tropical Medicine last year. I regret I am without the reference at that moment having travelled light from West Africa.

In the penultimate paragraph Dr. Douthwaite, referring to the difficulty of swallowing, advises the use of a nasal stomach tube. With adequate treatment this procedure becomes unnecessary in the majority of cases.

May I repeat the prognosis of tetanus is improving and will improve if modern methods are adopted.

Yours, etc.,

A. SHARP.

East India and Sports Club.

The Measurements of Lakes & Mountains

To the Editor of the GAZETTE.

SIR,—I am always intrigued by the heights of mountains and the area of lakes, so my interest was aroused by the vivid account that Colonel Dowsett has given of his travels in recent numbers of the *Gazette*. I read, with amazement, that Colonel Dowsett thinks that Lake Victoria is the largest lake in the world. The Caspian Sea is nearly seven times the size of the African lake, and Lake Superior is nearly twice the size, and a very rough calculation leads me to believe that Lake Michigan is nearly equal to Lake Superior in size. As to the statement that Kilima-Njaro being the third highest mountain in the world a very brief enumeration may be given. Everest is 29,002 feet in height, and Kinchingjunga is over 28,000. I fancy that there are a good many more Himalayan peaks over 25,000 feet high. But I find that I have not the books of reference that I have at home for finding out definitely about this matter. Aconcagua, in the Andes, is over 23,000 feet high. Antisana, Cotopaxi, and Chimborazo volcanoes, situated in the same great range are all higher than Kilima Njaro. As readers will know, it was in connection with these last peaks that Whymper considered that the aneroid barometer was not as good as the mercury barometer for taking the heights of mountains. In the Yukon there is Mount Logan, which is over 19,000 feet high. On the whole, I should say that there are at least a dozen peaks higher than the African mountain, and very possibly a good number more. I apologise for wearying you and your readers by attention to matters of this nature, but I dislike mistakes being made in such measurements.

Yours, etc.,

A. R. THOMPSON.

Sport

Cricket

GUY'S v. C. BURTON'S XI

At Honor Oak Park on 3rd May. *Won by 143 runs*. Guy's, 164 runs for 5 wickets (declared); Burton's, 21.

GUY'S v. LONDON HOSPITAL

At Hale End on 10th May. *Won by 94 runs.* Guy's, 208 for 4 wickets (declared) (A. V. Hurst, 69); London Hospital, 114.

GUY'S v. THE WANDERERS

At Honor Oak Park on 14th May. *Lost.* Guy's, 103; Wanderers, 200 for 6 wickets.

GUY'S v. O.C.T.U.

At Sandhurst. *Lost by* 42 *runs*. O.C.T.U., 181 for 5 wickets (declared) (J. H. Knight, 4 wickets for 80 runs). Guy's, 138.

Guy's

H. A. Thomas, c. and b. Clifford	47
S. N. Cole, b. Human	7
C. S. Gardner, run out	14
P. Brown, run out	4
W. A. Crabtree, c. and b. Human	40
R. Kynaston, b. Clifford	0
R. L. Shea, c. Buxton, b. Clifford	0
J. Goodhart, not out	11
J. H. Knight, b. McCulloch	1
T. Wooldridge, c. Childs, b. Buxton	5
Extras	9
Total	138

GUY'S v. PUBLIC SCHOOLS

At Honor Oak Park on 24th May. *Won by 9 wickets*. Public Schools, 169 for 6 wickets (declared). (R. L. Shea, 3 wickets for 26 runs; G. Hildich-Smith, 2 wickets for 18 runs). Guy's, 171 for 1 wicket.

Guy's

H. V. Hurst, b. Lloyd-Price	31
J. Murphy, not out	77
C. S. Gardner, not out	62
Extras	1
	171

T. H. Eustace, W. A. Crabtree, G. Hildich-Smith, P. Brown, S. N. Cole, J. Saunders, J. Goodhart and R. Shea did not bat.

GUY'S v. ST. MARY'S HOSPITAL

At Teddington on 31st May. *Drawn.* Guys, 169 runs for 3 wickets (declared).; St. Mary's, 126 for 8 wickets (C. B. Clarke, 5 wickets for 62 runs).

Guy's

A. V. Hurst, b. McQuaid	34
J. Murphy, st. Baker, b. McQuaid	28
H. A. Thomas, c. Campbell, b. McQuaid	13
C. S. Gardner, not out	56
C. B. Clarke, not out	35
Extras	3
	169

J. W. A. Crabtree, P. Brown, S. N. Cole, J. Saunders, J. H. Knight, R. L. Shea did not bat.

GUY'S v. SOUTHGATE

At Southgate on 1st June. *Won by 69 runs.* Guy's, 109; Southgate, 40 (J. H. Knight, 3 wickets for 11 runs; R. L. Shea, 3 wickets for 20 runs; C. S. Gardner, 3 wickets for 6 runs; A. Brown. 2 wickets for 2 runs).

Guy's

H. A. Thomas, b. Fish	1
C. S. Gardner, c. John, b. Emerson	25
D. Graham, b. Emerson	1
D. Boyd, c. Tween, b. Fish	0
F. Jowett, b. Emerson	1
A. Brown, run out	1
R. Lauder, c. Hawker, b. Emerson	0
G. Baker, not out	37
J. H. Knight, b. Fish	2
R. L. Shea, b. Fish	29
D. M. Strathie, b. Hawker	11
Extras	10
Total	109

Hospital Information, etc.

Notices

The Guy's Annexe at the Wildernesse, near Sevenoaks, will be open to receive patients on and after Monday, June 30th. Members of the Staff will be able to send in patients through the Superintendent's Office at Guy's, and arrangements have been made for an ambulance service between the two hospitals. Only in-patients will be dealt with.

SOCIETY OF APOTHECARIES OF LONDON.

Examinations for July are as follows :—

Surgery.—July 14th, 16th, 17th.

Medicine, Pathology and Forensic Medicine.—July 21st, 23rd, 24th.

Midwifery.—July 22nd, 23rd, 24th, 25th.

Pass List

ROYAL COLLEGE OF SURGEONS FINAL F.R.C.S.

May, 1941

A. J. Drew

SOCIETY OF APOTHECARIES OF LONDON FINAL EXAMINATION

May, 1941

Surgery

*A. L. H. Smith

Medicine

*N. A. St. C. Marley G. M. Pearson

Forensic Medicine

*N. A. St. C. Marley G. M. Pearson

* Have completed the examination

UNIVERSITY OF CAMBRIDGE. FINAL M.B. EXAMINATION.

Easter Term, 1941.

PART I.

Surgery, Midwifery and Gynæcology.

W. H. Chase F. M. P. Eckstein

D. G. Vulliamy

Birthday Honours

C.I.E.

Hugh Stott, O.B.E., M.D.

C.B.E. (Civil Division)

James Alison Glover, O.B.E., M.D.

Prisoner of War

Lieutenant Oliver Ive, R.A.M.C., previously reported missing.

Changes of Address

A. Gordon Taylor, L.D.S., R.C.S., 51, North End House, Fitzjames Avenue, W.14.

Organon Laboratories, Ltd., Brettenham House, Lancaster Place, Strand, W.C.2. *Temple Bar* 6785/7.

Births

ROUTLEY.—On June 15th, 1941, at Penang, to Barbara, wife of Dr. Paul Routley—a son.

Deaths

MALPAS.—On June 9th, 1941, at Boscombe, Bournemouth, Douglas Dent, M.D., formerly in practice in Biarritz, in his 90th year.

STEELE.—On June 15th, 1941, William Kenneth Steele, Lieut.-Col., R.A.M.C., J.P., of Springfield, Devizes, Wilts, aged 75.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *12th July* 1941 *Number* 1382

PASSIM

IN subsequent issues of the *Gazette* it is proposed to present a serial symposium on the subject of chemotherapy as applied to the sulphonamide group of drugs. Following a general introduction by Professor John Ryle there will be a paper by Dr. F. A. Knott, who considers the subject from a bacteriological point of view. The pharmacological and therapeutic effects of the sulphonamides and its various derivatives will then be discussed by Dr. N. Mutch, and Dr. A. H. Douthwaite will survey the indications for them in the field of general medicine. It is regretted that there will not be an equivalent communication with regard to general surgery, but the surgeon concerned objected, quite rightly, on the grounds that at present this subject is in much too fluid a state to make any dogmatic assertions or claims ; however, it is hoped that at an early date, perhaps before the symposium is completed, some accurate conclusions will have been reached and the matter clearly outlined for us. Mr. T. B. Layton discusses the relative value of sulphonamides in the realms of ear, nose and throat surgery ; Mr. V. E. Lloyd in venereal diseases, and Dr. David Erskine finishes the series by describing their uses in skin diseases.

Not since the introduction of insulin as a palliative specific in the treatment of diabetes melitus, has there been such a marked advance in the control of disease as when the sulphonamides made their entrance into the medical world. Fortunately they are antidotes for those organisms which most commonly infect the body and since " common things commonly occur " their consumption annually must reach enormous figures. The bacteriologists have carefully elucidated those organisms which are specifically affected and, what is just as important, they have discovered those organisms upon which it has no effect. The pharmocologists have worked out the various methods of administration and the necessary dosages required to maintain constantly effective level circulating in the bloodstream ; the toxic effects have also been described. All that remains is for the clinician to choose his cases wisely and, when he has satisfied himself about the diagnosis, to apply this specific form of treatment. But it is just at this stage that more than a few of our colleagues have erred ; they have come to regard this new remedy as a kind of tonic for pyrexial people and, not only does it fail to cure some of their patients, but when they are passed on to more responsible doctors their clinical picture is so confused that it is often quite impossible to make an accurate diagnosis. It would thus appear that there is ample indication for a general survey of this subject, and one can feel certain that the views and experiences of the contributors will provide a good foundation for those interested.

◆

OF all the medical certificates which the doctor is called upon to sign, perhaps the most unreasonable one is that recommending the patient for extra milk allowance. These certificates are disappoint ing because, in the first place, they do not leave it to the discretion of the doctor to prescribe extra milk for any deserving patient who, in his opinion, would benefit from such a measure. Secondly, the list of diseases as published on the certificate is hopelessly restricted and, in point of fact, it really amounts to a debilitated and undernourished child not being allowed extra milk because he or she has not a carcinoma of the œsophagus. The third point is that it is particularly undesirable for such a certificate to be handed to the milkman for his persual ; surely the patient's misfortune need not be advertised among the local tradesmen.

The Woman in the Little House

A Clinical Lecture delivered at Guy's Hospital Medical School on Monday, 12th May, 1941

By T. B. Layton, D.S.O., M.S.

I THOUGHT it would be well to leave pathological conditions alone to-day and to talk under a clinical title, so as to consider the extent to which the conditions under which the patient lives, the fears and anxieties, the hopes and happinesses to which he or she is subject affect the mind in health and during illness, and what bearing they may have upon treatment.

I have borrowed my title from a book by Mrs. Leonora Eyles that came out just after the end of the last war, and which had a very great effect upon me. I have purposely not re-read it, because I find that when I come after many years to re-read books that I am conscious have done this they tend to be disappointing. Therefore anything I say to-day must be attributed entirely to me, and you must not think that Mrs. Eyles is responsible for my remarks.

"The Woman in the Little House" is a married woman living at, shall we say, Peckham. She is not wealthy, she is not poor. When I say she is not poor I mean that her husband is earning a sufficiency of money to keep himself, his wife, and their two children neatly clothed, decently housed and properly fed, and to put aside something every week to enable them to go down to the sea for a week's holiday, and to leave in the money-box or the savings bank a sum of money for rainy days. And the most important of "rainy days" is illness in any member of the family.

On the other hand, she is not wealthy. There is no money to be spared for labour in helping her to run the house, and therefore the whole of the work devolves upon her. She has to scrub her own doorstep, to cook her own meals, to wash her own and her children's clothes, and to do all the housekeeping and purchasing herself.

Let us now imagine a woman with those responsibilities coming up to out-patients' and being told that she has got an acute mastoid and must be admitted to hospital at once for operation that evening or next morning. She will at once tell you she cannot possibly do it; she must go home and settle things first. It is a matter of judgment for you to decide whether she is so ill that you dare not allow her to do that. Unless she is definitely in danger of her life, you ought to allow her to go. To get her mind settled before you operate will have a great effect upon the final result of the case. She has to do this, first with regard to the running of the house, and, secondly, with regard to the means of looking after her children. Thirdly, she wants to know what is going to happen to her husband. Probably the children loom largest in her mind.

We will imagine that she is a woman of thirty-six, with children nine and eight years old. They may be able to manage for themselves with father's help, there may be a grannie or an aunt who will come round and look after them, or to whom they can go, and if they go round the husband may be able to look after himself or, on the other hand, he may be as great a baby as the children and need very nearly as much looking after. You cannot possibly know all these various circumstances which create problems in that woman's mind. If there is a third child—shall we say a baby of fifteen months?—she will worry *about that one most, and it may be the most* difficult one to deal with. She may have no one to whom she can entrust it while she is in hospital.

Therefore, always let that woman go home and settle things for herself if you possibly can, and get her to come back to the hospital at five, six, or seven in the evening. If she has not settled her affairs by then you have got to see what you can do to help her to deal with that family. The sister of the ward will do this work for you; but you are responsible, and you have to see that it is done and to put off your arrangements for operation the next morning until the day after if need be, and in the meantime get hold of the almoner and enlist her help in arranging for the settlement of the patient's family. That will quiet the patient's mind, and when you have done that you will be surprised how that woman will drop off to sleep and have a good night's rest before her operation without the necessity for any drug to send her to sleep, although the night before you heavily "doped" her, and she hardly slept a wink the whole night. This is a part of what the *Lancet* called "pre-operative meditation" a few years ago, as distinct from the pre-operative medication which was looming so large in the minds of the surgical profession at that time.

Let us now consider that patient after she has had her operation, when she is a bit better, sitting up in bed, and taking an interest in her affairs. This brings us to a problem of hospital administration. I maintain that that woman is entitled to have her husband come and visit her every evening in order that he may tell her how the children are getting on and report to her on the general running of the affairs of the house. The hour must be such as gives him time to get home from work, to have a wash and change his clothes if he is working at a dirty occupation, and it may be better for him to have some food before he goes round to see her. That involves a very important problem because, until recently, patients in hospital have only been allowed to see relatives at stated hours on two days a week, unless the patient is desperately ill and on what is known as the danger list. That danger list is really to soothe the emotions of the relatives than for the benefit of the patient. When a patient is very ill it is not good for her to have visitors for any length of time. When she turns the corner and begins to take an interest in things, if she has a job which is the whole of her life's work, as is that of "The Woman in the Little House," she ought to be entitled to have a visitor for a reasonable amount of time every day.

At the present time there is a considerable amount of latitude given to sisters—or taken by them—with regard to this matter. In some wards you will find that the sister has allowed the patient's relatives to come in nearly every evening; in other wards the patients' relatives are never allowed outside the fixed visiting hours, and if anything is said in these latter wards the reply is made, "It is the rule of the hospital," and you can get no further. So far as I can see, there was greater latitude in this at the municipal hospitals in London than at the voluntary hospitals just before the war, and, if I am right on that point, it is a sign that they are ahead of the voluntary hospitals in some ways in meeting modern needs.

Three years ago something happened which to my mind was very serious. The governors were badly in need of money, and they introduced a scheme of pay-beds in the hospital. This question was put to the Medical Committee for their opinions on the subject. Now there was no objection to the principle that a certain number of people coming into our wards should pay *ad hoc* something towards the cost of the bed as distinct from paying through the Hospital Saving Association or being paid for through a subscriber's letter. But there was a very great objection to the fact that this was not to be an *ad hoc* payment for the routine work, but that it gave them the power to purchase with money certain rights that were not given to other patients in the wards—rights which those who were thinking ahead in the hospital world were envisaging as part of the routine of every hospital in the future. We assented to this scheme. In my opinion wrongly.

In the future hospital world, when we start again after the war, I look to it that everyone will have curtains round their beds, of a rather different nature from those we have had at Guy's for so long, in order that the patients may have privacy when the hygienic processes are being attended to, and at other occasional times; but I do not believe that they should be allowed to surround themselves in seclusion at any time of the day, and this was how the purchasing of curtains was interpreted by, at least some of, the sisters in the wards. The result was that there were some beds entirely surrounded by curtains during the whole day, distinguishing these people, unpleasantly, from the rest of the patients. I look to the time when private patients will be admitted to wards and not to private rooms even though the wards be different ones; I am quite sure that the system we have got in nursing homes is bad for the patient. Wards of the future must have a reasonable number of isolation rooms into which the patients can be put when desperately ill, when they are coming round from an anæsthetic, and for some time after if the disease is of the type which leaves them ill for a long period of time, like a severe mastoiditis. But once they are past that it is bad for them to be in a little room by themselves, where they can ring their bell at any moment, summon a nurse and ask her to pass them a pencil or fetch them that book. When they are in the wards they realise from seeing other patients that these are more ill than themselves that they are not nearly as bad as they thought they were, all of which helps them on to a further convalescence.

Let us link this little digression into the hospitals of the future with "The Woman in the Little House." When she comes into hospital and has a mastoid operation she should be entitled to a separate room for three or four days, but after that she should not be entitled to it, she should be able to see that there are other patients worse than herself, and that she is already well on the way to recovery. But she should be entitled to have her husband—or, if he is not available, her mother or the other person who is looking after the children—to come in to talk to her about them and to calm her mind about the children at home. So also if supper be needed she is entitled to it and should not be able to have to purchase it.

Then we come to the third problem in the acute disease: When are you going to let her out, and where are you going to send her? Sometimes she ought to go out later than the other patient, sometimes she ought to go out earlier; sometimes she ought to be sent away to a convalescent home, sometimes she ought not. It is a matter of clinical judgment every time, a matter which you have got to weigh up and assess, and it is the woman's mental make-up and her anxieties with regard to her home that will largely decide you. Remember, there is no off-duty time for the woman in the little house. There is no light duty for her, and very often there is no one to come in and look after the house when she goes back to it. From the time that she leaves the hospital she has at once got to go full tilt in her life's work afresh.

Under these circumstances it may be essential to send her to a convalescent home, and if she is worried about getting back to the children it may be advisable to send her to that convalescent home a little bit earlier than you would otherwise do in order to shorten the total amount of time before she gets back. Contrariwise, if she is a thorough "worrier," and you know that she will break down if she goes back it may be a reason for deferring sending her to the convalescent home, because you know she will rush back home at the earliest possible moment and will be out of your hands.

That, then, is "The Woman in the Little House" when she has an acute disease. But you also have chronic conditions under which you will vary your treatment because of this particular type of patient.

I have at the present time under my care a woman with a polyp in her ear. I decided to avulse it, and should have liked her to come in to hospital; but she has two children, one a little boy aged seven, the other a baby still in the perambulator. Her mother can look after one child for a short time; but she cannot hand the other to anybody at present. I therefore had to do the operation on her as an out-patient, keeping her in only until she had entirely recovered from the anæsthetic.

That takes us to another point in hospital administration and in the building of hospitals that every one of you will have to think about after the war. At St. James's Hospital, Balham, we are very much better off for doing a thing like that than at Guy's. There is a large receiving ward with a number of beds into which patients can be put and kept for many hours. We have no such accommodation in the out-patient department of Guy's, and such accommodation as we have in the front surgery is very inefficient for that purpose. When you come to rebuild Guy's you will have to consider such cases as the one that I am describing and to plan out-patient departments with receiving ward in addition to the surgeries and the doctors' rooms.

Let us consider further "The Woman in the Little House" when she has chronic disease. We see in the Throat Department a considerable number of people with chronic illness to which a name cannot be put. There may be a moderate anæmia, and they are given iron, the hæmoglobi is got up, but their symptoms are not any the better, they are tired-looking, they say that they do not get any joy out of life, and they complain of "catarrh." When "catarrh" is complained of by a patient to-day it means what a "relaxed throat" did when I was a dresser. I remember Mr. Steward teaching that if a patient said she had a relaxed throat it meant that she knew she had a throat. In the same way if to-day she says she has catarrh, it means that she knows she has a throat or a nose or both, and it does not mean anything more in the vast majority of cases. The patient may be worn out physically or mentally upset. She notices the secretions of her own nose as they trickle over the soft palate and go down into the stomach.

When such a patient is "The Woman in the Little House" I give her a prescription that I learned from Sir William Arbuthnot Lane. It is to lie down for an hour after the mid-day meal. Let us think this out a little bit more. This woman gets up at about half-past six in the morning, or even if she does not get up at quite so early an hour, her mind is on duty from the moment when she wakes. She has to get her husband off to work and the children off to school, and then she has to settle down to do the housework, both the day-to-day housework of clearing up after the husband and the children—washing the breakfast things, making the beds, and so forth—and also that certain amount of work which the housewife does each day of the week in order to keep the house clean by the end of the fifth or sixth day. She then goes out and does her housekeeping, and gets back in time to prepare or cook the children's mid-day meal. In they come without any thought for mother, ravenously demanding their food, and they gobble it up and are off again. Then she has to settle down and wash up the lunch things and clear up the children's untidiness. From then onwards there is a slack in the life of the house, an ebb until the children come back from school, and she can, if she will and you insist, be quiet for a short period of time. But let us leave that for a moment. The children get back from school at about half-past four. They are hungry; they want their tea. They gobble it up and go out with their friends to play. Then it is time to begin to get her husband's evening meal ready, and also to make preparations for getting the children to bed. They come in late for the stated time, but she gets them to bed, and then gives her husband his meal. He takes off his coat and his boots, puts on a pair of slippers, takes out his pipe, rolls up his shirt sleeves, and reads a book or paper in front of the fire. He has had a hard day's work and deserves his rest when evening comes! And what does she do? She washes up after the evening meal, tidies up after the untidiness of the children as they swept through the house on the way to bed, and by the time she has finished it is time for her to go to bed herself. Any spare time she may have she uses for mending. And she does this, not five days a week, with a half day off on Saturday and a whole one on Sunday, but seven days a week. She never gets a week-end off, and even when the family go to the seaside, the children there are even hungrier, their clothes wear out more quickly, and she is at it as ever. She does this kind of thing year in and year out, and you are surprised when you cannot find anything to account for her symptoms, and even call her neurotic.

It is all to the good if you can get that woman to lie down for an hour after her mid-day meal. Persuade her to take a paper or a book to bed, to take off the tighter articles of her clothing (not that she wears any to-day) and get under the counterpane, not worrying whether she is going to sleep or going to read her book. If you do that you can keep her going, and if her hæmoglobin is down, giving her iron will then do her good, but it will not do her good if you do not get her to have that mid-day rest. She will say, "I do not want to go to rest in the middle of the day." She looks upon it as though it were something she ought not to do. But if you explain to her that from the moment she gets up in the morning until she goes to bed at night she is "on duty," and most of the time working hard, if you point out to her that her husband also does a day's work, but having done it is entitled to take off his coat and smoke his pipe and sit in front of the fire, she may allow herself to be persuaded that she is entitled to have that hour's rest after the mid-day meal, and once she is persuaded she will very probably carry it out.

I do not want you to think that she has got to carry it out every day of the week. Do not allow her to get into such a state that when it is the children's half-holiday and father has a day off they must lose the trip to the Zoo or Kew Gardens in order to give mother her rest. Do not allow the treatment of "The Woman in the Little House" to become such that she is thinking of the treatment the whole of the time as distinct from the life of the family as a unit. You will only be doing her harm in that way instead of good.

I have taken a clinical type. I have talked to you about what will happen to such a patient if she has acute disease, and what will happen to her if she has chronic disease, how you may have to modify what you think to be your ideal treatment in order to fit in with her mode of life, and I have also drawn attention to the fact that wrapped up with these things are at least two important things connected with the organisation of the hospital which will have to be considered by you fellows when we get hospital treatment going again after the war.

But I have talked about her as she was twenty years ago. Nowadays she is having her children earlier and at longer intervals. Instead of having them at somewhere about twenty-eight or twenty-nine, she is having the first one at eighteen, nineteen, or twenty, and she is using contraception not to limit her family, but properly to space them out. These people are arranging to have two or three children at two and a half or three-year intervals. True, Nature often upsets the arrangement, but I think it is a good move because the mother is young enough to be a "pal" to the children when they grow up. When the baby that she had at nineteen is herself seventeen the mother will only be thirty-six. If she had waited until twenty-nine to have that child she would be forty-six, and there is a lot of difference between the two.

The other way in which things have changed during the last twenty years is the very great increase in the population of this type of person. I believe they have become or are becoming the most numerous members of the community, and, moreover, that they form the best part of the community morally, intellectually, and physically. The interesting thing is that they have arisen entirely since the time that I came up to Guy's. At the beginning of the century there were the aristocracy and the county families. These, however, are passing away· Then there were the professional and business classes, and besides them there were the poor. The dividing line came between those people who were able to keep a servant and those who were not. The servants varied very considerably, and some of them led a very grim life, as you can read from time to time in Dickens's works or as you have described by George Moore in his novel called *Esther Waters*. Below this everybody was poor. That meant that their wage-earning capacity was such that there was a struggle for the last penny to keep sufficient food in the family stomachs, and usually they failed to keep themselves in good condition from the nutrition point of view.

In between these two financial groups there has grown up during the last forty years this very large number of people whom you can see shopping at Brixton, at Streatham, at Camberwell, at

Kilburn, and all round the northern suburbs. The other difference between "The Woman in the Little House" to-day and the one at the time that Leonora Eyles wrote is that she has been out in business and has had a job. Perhaps she looks back with a little bit of disappointment that she is not still there; although she groused at it at the time she now realises it was a happy period. She also realises that however hard she may have worked in any job she got, she works harder when she is married and has become "The Woman in the Little House." Later she realises that there also she has had happiness.

Try and remember these few words that I have said and apply the principles in your clinical medicine to other types of individuals. Remember above all that treatment is not what you see in the text-books; but is doing your best for the patients under your care under the conditions in which they are living and you are working.

Sector News

Guy's Letter

We have recently visited the Wildernesse Hospital at Sevenoaks, where patients are now being admitted and treatment carried on. That we came back eaten up with jealousy for those who are resident there is the measure of the impression with which we returned. Any attempt at description of the beauty of the house or of its glorious surroundings would be commonplace. We will, however, say that it seems by no means difficult to convert a mansion into a hospital, and certainly it is not unsuitable. If, after the war, the stately homes of England go a-begging through lack of the vulgar currency, let them find retirement and long continued usefulness in the service of the sick. By this expedient they will be preserved and many of the present-day buildings with outsides like factories and insides like soda-fountains be mercifully stillborn. Our visit disappointed us in only one respect. We had been told that Squire Kilpatrick dressed as the part, but when we saw him he looked what he was—superintendent and surgeon.

The confusion over selection of cases to be evacuated is now to be solved by the housemen going round with Dr. Bishop every Tuesday. We welcome this proposal.

A more vigorous campaign to make members of the hospital gas-conscious is soon to be put on foot. There may be a day when what seemed irksome will be remembered thankfully.

All of us send our best congratulations to Mr. Kenneth Martin and his wife on their marriage last week. It is believed that this event will halve the daily mail arriving in Nuffield House in the future.

The Rev. A. G. Duckett has been appointed acting chaplain to Guy's Hospital in succession to the Rev. V. G. Clarke, who lately left for the Army. We welcome Mr. Duckett and bid farewell to Mr. Clarke.

We had occasion two weeks ago to mention one effect of the hot weather. Last week the Theatre staff expected the classical operation performed by rabbis as a rite to be undertaken with the instruments for a D. and C. The faith of these dwellers in caves below Out-patients is unknown. We are asking Dr. Felix Brown to review the matter.

Whilst we congratulate Mr. Eric Davies on his appointment as a Surgical Registrar we warn house surgeons against him during their take-in. He must be the first Registrar to record, under the diagnosis, the time at which the take-in H.S. was called. It is thought that this was Mr. Davies's practice with his coolies in Shanghai.

Good luck to all who labour with the Conjoint examiners in this hot weather.

R. T. H.

Orpington Letter

Hardly a letter passes without our commenting on either an addition to, or a subtraction from, our number, and here we have no exception, for Bernard Leibel is leaving us to go to Dartford. Leibel has been with us for only a short while, but we can say of him, as is said in Suburbia: "So pleased to have met you." He goes to replace one of our old friends, Bobbie Roberts, who is being called up, and we have pleasure in here sending the latter the very good wishes of his former colleagues.

"Rehabilitation" has come to stay, and we are hoping that before long all the medical officers will be provided with at least one waste-paper basket.

We have sat and pondered now for a whole half-hour since writing the last paragraph, but we just cannot think of any further news, so at the expense of being tame we here conclude our missive.

B. D. J.

The Wildernesse Letter

On the afternoon of June 30th the first convoy of fifteen patients arrived by Green Line ambulance from Guy's and was received by Mr. Kilpatrick, whom we are very fortunate in having as our Deputy Superintendent. It is appropriate that the first patient to enter the building should have been a native of the Borough. For over a month previously Sister Bell and her staff had been toiling ceaselessly preparing the rooms as wards and equipping the theatre.

In general plan the house is divided into three floors and a basement. The ground floor has five large rooms around the central oak stairway; the first floor has a large number of smaller rooms, and some of these will be used for private patients. Sister Gale and Sister Tibley superintend these two floors. The top floor provides the Nurses' Home, and one wing of it has been graced with that revered name, "The College," and accommodates the two residents, Mr. Jackson and Mr. Martin. The basement contains the kitchens, but one room has been given us as the Pathological Laboratory, and this has been well equipped by Dr. Knott, who has been down here several times bringing equipment and giving valuable advice. He has also undertaken to do all the investigations we may want to send to him at Guy's. When the hospital is full there will be about 125 patients, and, judging by this first week, there should be a fair number of interesting surgical cases.

The grounds are very extensive and beautifully kept, and they include an 18-hole golf course, tennis courts and a putting green. The shade of the deodar provides a cool spot on the lawn for tea or after-dinner coffee. So far we have only seen Mr. Eckhoff, Mr. Cairns and Mr. Atkins, but we are hoping that other members of the staff will come, and perhaps they will have added a tennis racquet or a bag of clubs to their instrumentarium.

The building used to be a country club, and a small part of the building is still maintained as a club for resident members. The catering is now all done by the Guy's staff and the food is excellent; the residents feed in the club.

There is to be an official opening day on Wednesday, July 9th, when Lord Goschen will be present to receive the guests, and we shall also have the pleasure of having Lord Nuffield with us, but the account of this must wait till the next issue.

Out of the travail of the recent months of bombing Guy's has brought forth a daughter; we hope that as the child grows the best features in the mother's character will be found in her and be admired.

D. M. J.

Pembury Letter

While the rest of the Sector may be celebrating the opening of the Wildernesse we at Pembury can only regard this event with remorse, for it has stolen Kilpatrick from us. We had known for some time that "Kilp." was going to be put on the road again, but this has done nothing to reconcile us to our loss, and every section of the community here will miss him greatly. We hope that his new job will provide him with sufficient work on which to expend his immense store of energy. We are extraordinarily lucky in being able to welcome Hugh Harley in his place. We only said *Au revoir* when he left us in December, and his visits since have forcibly reminded us of his continued existence.

We also extend a welcome to Dr. Moncrieff, who brings her experience of pædiatrics at Aberdeen to assist Dr. Jacoby in the children's wards. We wish her luck in fighting the infectious diseases which at the moment are so curtailing activity there as a result of the inadequate facilities for isolation both inside and outside the hospital.

For several weeks now there has been great activity on the lawn outside the Nurses' Home, which is now covered by an intricate pattern of trenches. This is not a defence against unwanted visitors, but the beginning of a new extension to the Home—a wartime luxury which may surprise those of another base hospital who have seen a similar undertaking remain a mere skeleton of its eventual self for a year or more.

The resident medical staff are also to have their comfort increased, and new quarters are now in preparation where R.M.O. and House Officer will sleep under one roof, though accommodation for the former will be more spacious as befits the greater dignity of the rank.

At the beginning of the month the administration of the hospital slipped from the clutches of the Public Assistance into the arms of the Public Health. The true effect of this momentous change we must await with patience, but the Medical Officers view with anxiety the disappearance of the casuals on whom, they have been repeatedly told, they are entirely dependent for their vegetables. On the other hand, there may now be more left over for them. G. L. L. R.

Gas at Guy's

(It is felt that the present is the most appropriate time to overhaul the arrangements for combating gas attacks. The first of the following instructions has been circulated to everyone resident at Guy's, including students, nurses, administrative staff, porters, etc. Owing to the need for economy in the use of paper, however, it is not being sent to the large number of people who work at Guy's during the day but do not sleep there at night, and by publishing it here the GAZETTE *has made it possible to draw the attention of many of these daily workers to the notes. The second instruction is the first of a series of more detailed notes dealing with special aspects of the problem and is being circulated only to the people actually concerned, in this case medical officers and students on the air-raid rota and the nursing staff of the Decontamination Units and of the Eye Ward and York Ward.*

The author does not claim to be an authority on the subject, nor to have any personal experience of gas, but feels that the arrangements made to deal with gas raids are very largely an administrative problem which should therefore be handled by the Superintendent's Office. In order to rectify the deficiencies due to his personal ignorance on the subject he has consulted the various manuals issued by the Ministry of Home Security and has had the benefit of numerous conversations with such experts as Professor Ryle and Professor Gibson.)

P. M. F. BISHOP,
Deputy Superintendent.

4*th July*, 1941.

I. PERSONAL PROTECTION.

Introductory.

WHEN he returns to his assault on this country the enemy may be tempted to use gas in a renewed effort to undermine civilian moral. We should, therefore, employ the next few weeks' respite to prepare ourselves. These notes, which will be followed by more detailed instructions, are intended to be read by everyone resident at Guy's, so that all may know what to expect and how to act if gas comes.

1. *Types of Gas which may be used.*

(1) *Tear Gas.*—The effects are instantaneous. The victim is forced to keep his eyes closed owing to severe smarting and profuse weeping. Once out of range of the source of contamination, however, symptoms rapidly disappear. As there are no after-effects treatment is unnecessary. A gas mask, of course, protects the eyes completely, and tear gas is commonly employed in practices designed to encourage the public to become gas-mask conscious.

(2) *Nose Irritants.*—These produce the symptoms of a severe cold with sneezing, fullness in the head, sore throat and tightness of the chest. Since the effects are delayed the victim may have moved away from the site of contamination and put on his gas-mask before they appear. He therefore tends to lose faith in his mask. If it is worn when the gas is encountered, however, complete protection is afforded. The gas may nevertheless cling to his clothing, like tobacco smoke, and he should discard his outer garments and put them in a decontamination bin before removing his gas-mask. The symptoms are transitory and there are no after-effects. All that is needed, therefore, is a brief period of rest until the symptoms have disappeared.

(3) *Lung Irritants.*—Phosgene, which has the characteristic smell of *musty hay*, is the most likely gas of this type to be used. Since it is carried away by the wind the victim can escape by running at right-angles to the direction of the wind. Here, again, a previously adjusted gas-mask affords complete protection. Symptoms may be delayed for several hours and anyone who may have been in contact with the gas should report immediately for observation and treatment. The main effect is increasing shortness of breath. The symptoms are aggravated by exertion and victims should therefore be treated as stretcher cases.

(4) *Blister Gas.*—This is the most likely gas to be used and the most difficult to deal with. Both the vapour and the liquid remain at the site of contamination for some time. Both may cause severe burns of the skin. The most serious injuries, however, are those of the eyes and lungs and they can be avoided by wearing a gas-mask. Heavy clothing offers fair protection to the skin, and the hands and neck should be covered up immediately

the vapour is detected. Contaminated clothing should be removed as soon as possible and the whole body thoroughly washed with plenty of soap and warm water. At the entrance to all buildings where washing facilities are available, decontamination bins will be provided for shoes and outer garments. Underwear will be placed in bins in the bathing rooms. If the eyes have been involved they should be thoroughly irrigated in the Decontamination Centre in the basement of the Massage Department. Speed is the vital factor in preventing after-effects. Literally every minute counts, especially when the eyes are affected. Liquid contamination should be removed immediately with a handkerchief from the bare skin, which should then be rubbed with anti-gas ointment. The handkerchief should be placed in a decontamination bin. The ointment, which can and must be obtained by everyone free of charge from the Dispensary *now* and should be carried in the gas mask case, is the only completely effective antidote to liquid contamination when applied at once though early washing may mitigate the more serious after-effects. Large pots of the ointment will be available at convenient places in the Hospital in case the personal supplies have been left behind.

Two types of blister gas are :—

(*a*) *Mustard Gas.*—This has a relatively faint smell of mustard, horseradish, onions or garlic. The appearance of the skin burns is *delayed* for two to eight hours. Mustard gas is the most corrosive organic chemical likely to be encountered.

(*b*) *Lewisite.*—This has a strong, characteristic smell of *geraniums*. It produces immediate irritation and subsequently severe injuries to the eyes and nose.

2. *Gas Masks.*—The gas-mask offers complete protection against tear gas, nose irritants, lung irritants and the most serious consequences of blister gas—namely, injury to the eyes and lungs. Familiarity with its use is indispensable and it should be worn for a short period at least once a week; hence the gas-mask practices at Guy's between 11 and 11.15 on Wednesdays. In addition, periodic gas-mask drills for everyone resident in the Hospital are being organised to test the efficacy of the mask, to give detailed instructions as to its adjustment and how to fold it up and to explain how to avoid dimming the eye-pieces during use. The time may come when it will be wise to expect gas at any moment and then the gas-mask should be at hand throughout all periods of alert.

3. *Gas Identification Officers.*—There is always one or more of these officers on duty at Guy's. They will give immediate information as to the type of gas which has been released and will indicate the extent of the contaminated areas, which may have to be roped off. During a gas attack these officers will wear yellow steel helmets.

4. *What to do in a Gas Raid.*—Unless your duty compels you to do otherwise stay indoors, preferably on the first or second floor (if the danger from high explosive bombs is not too great), in a room with windows and doors closed and ventilator fans switched off. You will then be practically immune. Pet animals should be taken immediately to such a room. If you must go outside or are working in a basement or on a ground floor without adequate protection against gas you must wear your gas mask. Do not enter an area known to be contaminated with blister gas unless you are wearing protective clothing. If you have been exposed to blister gas vapour, go and wash at once, taking care not to spread the contamination. If your eyes have been affected they must be attended to before anything else. If you have been splashed on the bare skin with liquid blister gas use your anti-gas ointment immediately.

II. SORTING AND RECEPTION OF GAS CASUALTIES.

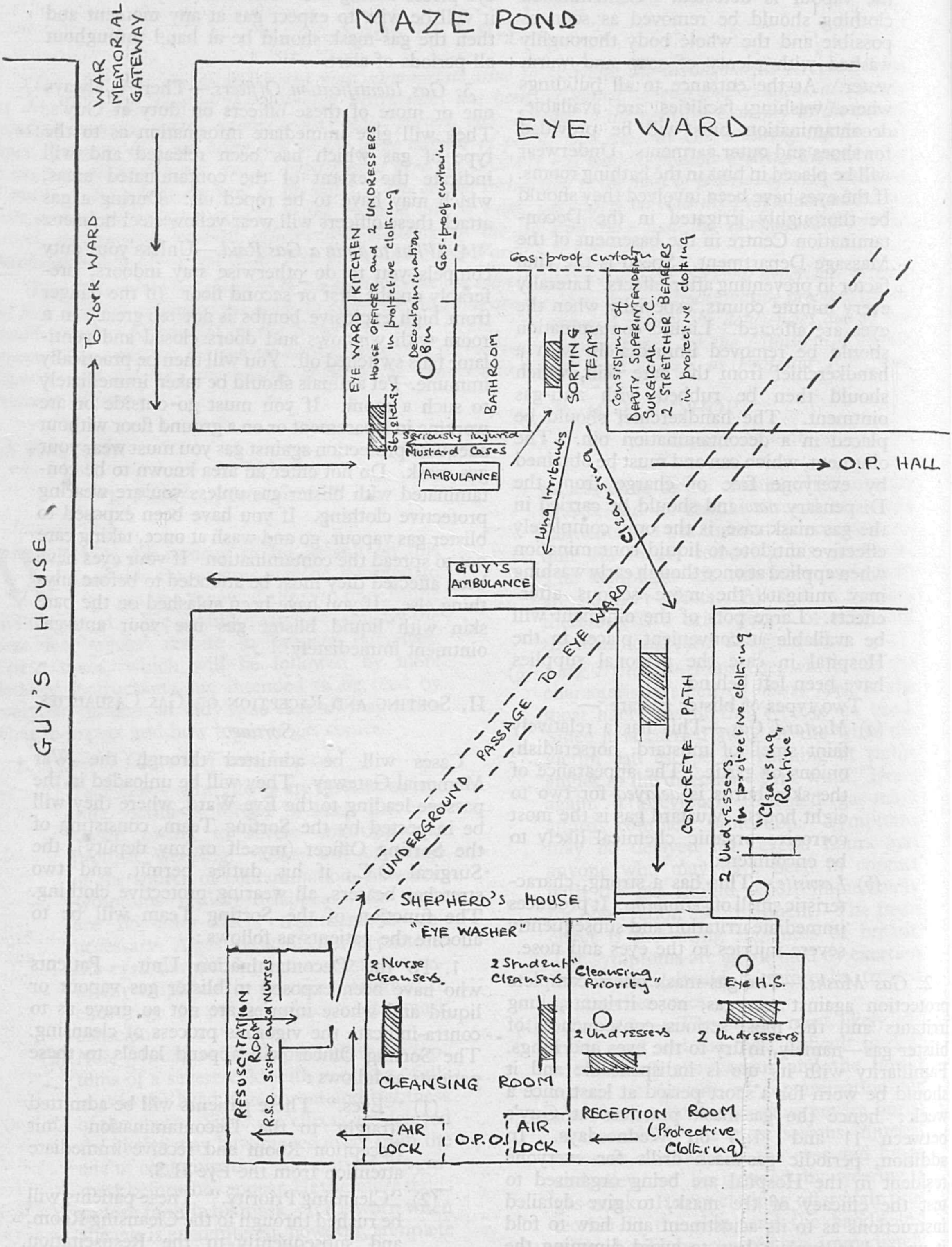
Sorting.

Cases will be admitted through the War Memorial Gateway. They will be unloaded in the passage leading to the Eye Ward, where they will be inspected by the Sorting Team, consisting of the Sorting Officer (myself or my deputy), the Surgical O.C., if his duties permit, and two stretcher bearers, all wearing protective clothing. The function of the Sorting Team will be to allocate the patients as follows :

1. To the Decontamination Unit. Patients who have been exposed to blister gas vapour or liquid and whose injuries are not so grave as to contra-indicate the vigorous process of cleansing. The Sorting Officer will append labels to these patients as follows :

(1) " Eyes." These patients will be admitted straight to the Decontamination Unit Reception Room and receive immediate attention from the Eye H.S.

(2) "Cleansing Priority." These patients will be rushed through to the Cleansing Room, and subsequently to the Resuscitation


MAZE POND
WAR MEMORIAL GATEWAY
TO YORK WARD
EYE WARD
EYE WARD KITCHEN
House Officer and 2 UNDRESSERS in protective clothing
Decontamination Bin
Gas-proof curtain
BATHROOM
Stretcher
Seriously Injured Mustard Cases
AMBULANCE
Gas-proof curtain
SORTING TEAM
Consisting of DEPUTY SUPERINTENDENT SURGICAL O.C. 2 STRETCHER BEARERS in protective clothing
Lung Irritants
Cleansing
O.P. HALL
GUY'S AMBULANCE
GUY'S HOUSE
UNDERGROUND PASSAGE TO EYE WARD
CONCRETE PATH
2 Undressers in protective clothing
"Cleansing Routine"
SHEPHERD'S HOUSE
"EYE WASHER"
2 Nurse Cleansers.
2 Student Cleansers
"Cleansing Priority"
Eye H.S.
2 Undressers
2 Undressers
RESUSCITATION ROOM
R.S.O. Sister and Nurses
CLEANSING ROOM
RECEPTION ROOM (Protective Clothing)
AIR LOCK
O.P.O.
AIR LOCK

Room or, if possible, straight to the Eye Ward.

(3) " Cleansing Routine." These patients will undergo the normal routine of the Reception Room, Cleansing Room and Resuscitation Room and will be admitted in due course to the Eye Ward.

2. To the Eye Ward. Patients whose surgical injuries or shock take precedence over their exposure to blister gas. They will be passed in through the window of the Eye Ward kitchen, relieved of their outer garments and boots and, if necessary, have their hair rapidly shaved before being admitted to the Ward.

3. To the York Ward. Patients who have been exposed to lung irritants. They will be taken in the Guy's ambulance to the Borough High Street entrance of the York Ward.

4. To the Out-patient Hall. Patients suffering from the effects of tear gas or nasal irritants, or patients in whom there is no clear evidence either of blister gas or lung irritant contamination.

Reception.

1. *Decontamination Unit.*

(1) *Removal of Outer Garments.*—As far as possible this should be done outside by two undressers in protective clothing. This procedure should be applied only to patients labelled " Cleansing routine." If the night is dark, if the weather is cold, or if the blitz is violent, outside undressing should be dispensed with.

(2) *Reception Room.*

(*a*) " Eyes." Cases labelled " Eyes " should be taken straight to the Eye H.S., who will irrigate the eyes while two undressers remove such garments as possible.

(*b*) " Cleansing priority." Undressers will remove only the outer garments and shoes, and send the case through to the Cleansing Room immediately.

(*c*) " Cleansing Routine." These cases will be undressed as far as possible before being admitted to the Cleansing Room. The Reception Room personnel (all wearing full protective clothing) will consist of two outside undressers, the Eye H.S., and four inside undressers to deal with " Cleansing Priority" and " Cleansing Routine " cases.

(3) *Cleansing Room.*—Here washing will be undertaken under the supervision of a House Officer (the O.P.O. on duty) by two student cleansers and two nurse cleansers, assisted by a student eye washer (all in modified protective clothing).

(4) *Resuscitation Room.*—Warmth, hot drinks, reassurance and first aid is the function of this part of the unit. The first three will be provided by Sister Broome and her nurses. The condition and first aid treatment of the patient will be attended to by the surgeon on call, if available, or his deputy.

2. *The Eye Ward.*

(1) *From the Kitchen.*—Cases whose surgical condition demands priority will be passed through the window from the Park and dealt with by the H.S. on duty, two undressers and a nurse (all in full protective clothing). The outer garments and shoes will be removed and the hair cut short if necessary. Splashes of liquid may need removal and application of anti-gas ointment to the affected skin. The eyes may require irrigation, and if further washing out is desirable a label marked " irrigate eyes " will be affixed to the patient before he is passed through to the ward. Patients received from the kitchen should be placed in beds immediately adjoining the door and screened off.

(2) *From the Decontamination Unit.*—These cases will be treated on their surgical merit. They will be admitted by the door adjoining the central staircase. The injuries due to their exposure to blister gas will be treated as burns, other than the eye and lung complications, and their wounds will be treated by ordinary surgical methods.

3. *The York Ward.*—Cases received here will have been exposed to lung irritants (phosgene). The more serious cases needing immediate oxygen therapy will be admitted to the female ward, the less severe cases and cases for observation will be admitted to the male and children's wards. (These wards will have been previously evacuated.)

4. *Out-patient Hall.*—Cases which have been brought in through the War Memorial Gareway as suspected gas casualties, but which are considered by the Sorting Officer to have been exposed neither to blister gas nor to lung irritants, will be admitted through the Park entrance to the Out-patient Hall and dealt with as necessary.

Correspondence

Prevention of Tetanus

To the Editor of the GAZETTE.

SIR,—Dr. R. E. Smith wrongly implies that I presented tetanus toxoid as an infallible immunising agent. In point of fact I said that reports on its use were encouraging and that I hoped that with increased experience we should be able to rely upon it in case of minor wounds and reserve serum for those of great severity. That such a view is justified is, I submit, supported by reports of numerous reputable workers, *e.g.* Perry, Parish and O'Brien. Ramon, in the Presse Médicale (1939), writes that in 1936 800,000 French troops were given tetanus toxoid inoculations. In the subsequent three years no case of tetanus arose. Compared with the frequency of the disease, especially in colonial troops, prior to 1936 this surely encourages optimism. Lieut.-Col. H. J. Bensted, in his Harben Lecture (1940), tells us that 90 per cent. of our troops were given this protective inoculation. After the fighting and withdrawal from France not one of them developed tetanus, whereas eight of the unprotected 10 per cent. did so.

Dr. Smith thinks but little of high titre of antitoxin as evidence of protection. He appears to base his doubt on the well-known fact that antiviral bodies in the blood do not necessarily protect against infection. The comparison should never have been made, for we are not discussing virus diseases. Descombey has shown that if tetanus toxoid be injected, as for a human, into a horse then 1 c.cm. of the animal's serum will neutralise a single guinea-pig lethal dose of toxin; yet with this low titre the horse will withstand the introduction of tetanus spore-laden splinters which *invariably produce death in the unprotected* animal. A third or "boost" dose of toxoid given some months after the first two will greatly raise the antitoxin titre; numerous animal experiments have shown that there is a rough parallelism between this titre and the degree of protection afforded.

None can deny that the weight of evidence strongly supports the claim put forward for anti-tetanus toxoid. I admit to surprise that Dr. R. E. Smith should mingle a praiseworthy attitude of criticism with such sublime self-confidence as to claim powers enabling him to distinguish between wounds that are infected with tetanus and those that are not.

May I use this opportunity of adding that I have recently read Dr. Cameron's lecture in the *Gazette* of a few years ago in which he shows that many cases of so-called tetanus neonatorum suffered actually from meningitis. In view of this it is clear that I overstressed the frequency of tetanus in babies in certain countries.

Yours, etc.,
A. H. DOUTHWAITE.

49, Harley Street, London, W.1.

Sport

Cricket

GUY'S v. LONDON FIRE SERVICES

At Honor Oak Park on 7th June. *Won by* 104 *runs.* Guy's, 185; London Fire Services, 81 (J. H. Knight, 5 wickets for 21 runs; T. Wooldridge, 3 wickets for 21 runs).

Guy's

A. V. Hursts b. Lees	4
E. G. Murphy, c. Blackston, b. Lees	1
H. A. Thomas, c. and b. Twohy, b. Murray	15
S. N. Cole, l.b.w., Murray	10
H. Smith, c. and b. Lees	56
W. A. Crabtree, c. Beadwell, b. Twohy	53
A. Brown, l.b.w., Lees	30
P. Brown, b. Twohy	2
D. Cobman, l.b.w. Twohy	3
T. Wooldridge, not out	1
J. H. Knight, b. Twohy	1
Extras	9
Total	185

GUY'S v. 55*th* DIVISION A.F.S.

At Honor Oak Park on 14th June. *Won by* 85 *runs.* Guys, 192; 55th Division A.F.S., 107. (J. H. Knight, 3 wickets for 11 runs; A. V. Hurst, 4 wickets for 25 runs; T. Wooldridge, 2 wickets for 11 runs; T. Curtis, 1 wicket for 5 runs).

Guy's

E. G. Murphy, c. and b. Jenkins	26
A. V. Hurst, b. Williamson	10
C. S. Gardner, l.b.w. Buxton	80
D. A. Crabtree, b. Jenkins	4
S. N. Cole, b. Williams	12
J. Goodhart, b. Bishop	23
R. L. Shea, c. Grigg, b. Bishop	6
T. Wooldridge, c. and b. Buxton	5
J. H. Knight, b. Jenkins	12
T. Curtis, not out	1
Extras	13
Total	192

GUY'S v. LONDON FIRE SERVICE.

At Honor Oak Park on 7th June. *Won by 104 runs.* Guy's, 185 ; London Fire Service, 81 (J. H. Knight, 5 wickets for 21 runs ; T. R. Wooldridge, 3 wickets for 21 runs).

Guy's.

A. V. Hurst, b. Lees	4
E. G. Murphy, c, Blackstone, b. Lees	1
H. A. Thomas, c. Twohy, b. Murray	15
S. N. Cole, l.b.w., b. Murray	10
G. Hildick-Smith, c. wicket, b. Lees	56
J. W. A. Crabtree, c. Beardell, b. Twohy	53
A. Brown, l.b.w., b. Lees	30
P. Brown, b. Twohy	2
—. Cobham, l.b.w., b. Twohy	3
T. R. Wooldridge, not out	1
J. H. H. Knight, b. Twohy	1
Extras	9
Total	185

GUY'S v. 55TH LONDON FIRE SERVICE.

At Honor Oak Park on 14th June. *Won by 7 wickets.* Guy's, 192 ; 55th London Fire Service, 106 (A. V. Hurst, 4 wickets for 25 runs ; J. H. Knight, 3 wickets for 33 runs ; T. R. Wooldridge, 2 wickets for 11 runs).

Guy's.

A. V. Hurst, b. Williamson	10
E. G. Murphy, c. and b. Jenkins	26
C. S. Gardner, l.b.w., b. Burton	80
J. W. A. Crabtree, b. Jenkins	4
S. N. Cole, b. Williamson	12
J. G. Goodhart, b. Bishop	23
R. L. Skea, c. Grigg, b. Bishop	6
T. R. Wooldridge, c. and b. Burton	5
J. H. H. Knight, b. Jenkins	12
R. C. Curtis, not out	1
Extras	13
Total	192

GUY'S v. "A" DIVISION, METROPOLITAN POLICE.

At Honor Oak &ark on 21st June. *Lost by 25 runs.* Metropolitan Police, 123 (C. B. Clarke, 6 wickets for 23 runs ; R. L. Skea, 2 wickets for 37 runs ; G. Hildick-Smith, 2 wickets for 38 runs) ; Guy's, 98.

Guy's.

A. V. Hurst, c. Clark, b. Brett	35
E. G. Murphy, l.b.w., b. Brett	8
C. S. Gardner, c. Brett, b. Clisby	25
C. B. Clarke, c. Brett, b. Gorman	0
G. Hildick-Smith, c. Clark, b. Clisby	10
P. Brown, b. Clisby	7
—. Cobham, run out	5
Pritchard, b. Brtet	0
R. L. Skea, b. Brett	6
T. R. Wooldridge, not out	0
C. Curtis, b. Brett	0
Extras	2
Total	98

Hospital Information, etc.

Pass List

CONJOINT BOARD.
FIRST EXAMINATION.

March 1941.

Anatomy.

A. Brown
H. M. Emrys-Roberts
T. H. Eustace
M. V. Guilmaut
G. G. Jackson
J. C. Matthews
H. C. Morris
C. L. E. H. Sharp
A. B. Vanscolina
C. C. Vidot
G. R. Wotton

Physiology.

A. Brown
C. L. E. H. Sharp

Pharmacology.

J. D. Buxton
C. M. Dave
R. A. H. Dubery
J. D. Everall
D. Gill
W. J. B. Hett
R. B. Illing
M. G. Marks
R. D. Plowman
N. A. Punt
J. Ronchetti
J. P. I. Rose
R. L. Skea
T. R. Waters
M. Wilks

ROYAL COLLEGE OF SURGEONS.
L.D.S.
FINAL EXAMINATION.

June 1941.

PART I.—*Surgery.*

H. L. Bevan
D. A. Clough
G. L. Cocker
P. C. Gartrell
R. M. Gillies
T. J. Hancock
E. Horne
H. H. S. Payne
J. Rankin
A. Ross
N. I. Scott
D. C. Steven
T. W. H. Woodward

PART II.—*Dental Surgery.*

A. H. Bell
S. B. Bennett
M. K. Burt
D. A. Clough
J. Cranfield
K. E. Gateley
D. A. S. Harvey
R. N. Lewis
D. Mackenzie
G. Morris
N. A. Power
J. F. S. Rumble
J. C. Timmis
S. P. Vorster
E. D. Whiteley
E. H. Wicker

L.D.S. EXAMINATION.

April 1941.

Dental Metallurgy

J. B. Andrew
K. N. Brown
J. G. Daviner
J. D. Green
R. J. Hart
P. Maxwell-Stephens
P. T. Pain
A. D. Robinson
A. G. Starte
G. Thompson
H. J. Tozer
M. G. Trott
J. E. C. Weddup

Dental Mechanics.

E. N. Archard
R. N. Beare
A. W. Bevis
J. Bunch
C. G. Chester
D. F. L. Cook
F. P. Dalton
A. J. R. Davies-Evans
J. R. Dimock
B. G. E. Donner
E. A. Glover
P. C. Grummitt
P. D. Harvey
M. Levene
G. E. Meech
H. Mistlin
D. S. Nelson
J. E. Poemtain
A. D. Robinson
F. B. Sartory
P. J. Wardell
R. Woollcott
J. K. Yerbury

Anatomy and Physiology.

B. G. E. Donner
J. E. Dyke
G. F. King
A. E. A. Lister
C. S. Matthews
G. E. Meech
N. D. Miller
G. N. Pleasant
J. G. Richards
I. T. M. St. George

Special Anatomy and Physiology.

E. N. Archard
A. W. Bevis
N. P. Brensdon
J. Bunch
C. G. Chester
B. H. Dicker
J. R. Dimock
J. R. Fuller
P. D. Harvey
A. J. Hayward
P. Jones
L. J. Leggett
M. Levene
D. Middleton
R. Middleton
H. Mistlin
J. E. Poemtain
J. A. W. Purnell
D. A. Reaney
F. B. Sartory
V. L. Simons
C. Sumsawaste
R. A. S. Tipper
P. J. Wardell
R. Woollcott

UNIVERSITY OF LONDON.

THIRD (M.B.B.S.) EXAMINATION.

April 1941.

Pass

Old Regulations

A. M. Dawes

Revised Regulations

A. G. C. Cox
P. Harvey
S. W. Hinds
S. Muntarbhorn
R. E. Rewell
J. A. Williams

PART I.—Revised Regulations.

G. J. Amiel
R. A. Craig
P. R. C. Evans
L. R. R. Fourman
J. A. Gillett
R. C. Hallam
M. P. Hutchinson
B. D. L. Johnson
R. U. F. Kynaston
J. K. Martin
R. J. W. Rees B.Sc.
L. Rendall-Baker
R. M. Sharpe
P. A. J. Smith
J. S. Stead
D. H. Wright

PART II.—Revised Regulations

A. Bloom
G. H. D. Channing
H. P. Guerrier
H. P. Jones
H. L. Joyce
R. U. F. Kynaston
F. R. C. Manning
T. McKeown
L. Rendell-Baker
St. J. M. A. Tolhurst
H. W. Wheate

SOCIETY OF APOTHECARIES OF LONDON.

PRIMARY EXAMINATIONS

April 1941

Materia Medica, Pharmacy and Pharmacology

P. Morrell-Thomas

Anatomy

K. R. J. Coates
G. R. Wotton

Physiology

J. C. Matthews
G. R. Wotton

FINAL EXAMINATION

April 1941

Surgery

C. A. Anderson

Midwifery

P. R. Green
R. L. Skea

Papers by Guy's Men

Holms Selwyn. A Case of Cleido-Cranial Dysostosis. *Brit. Dent. J.* 1941, **70**, 441.

Eckhoff, Nils L. Prolapse at the Umbilicus. *Brit. J. Surg.*, 1941, **28**, 628.

Symonds, C. P. Closed Head Injuries. *J. Roy. Army Med. Corps*, 1941, **76**, 320.

Bunyan, John. Treatment of Burns and Wounds by the Envelope Method. *Brit. Med. J.*, 1941, ii, 1.

Changes of Address

H. Mc. D. Parrott, M.B., B.S., Martins Wand, Blackheath, near Guildford, Surrey.

T. Brocklehurst, M.R.C.S., L.R.C.P., Upton Leigh, Beaconsfield, Bucks.

N. L. Eckhoff, M.S., 11, Upper Brook Street, W.1 (Tel.: Mayfair 3300), Rustling, Crawley Down, Sussex (Tel.: Copthorne 301).

Deaths

STILL.—On June 28th, 1941, at Harnham Croft, Salisbury, Sir Frederic Still, K.C.V.O., M.D.

EDS. {N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *26th July* 1941 *Number* 1383

PASSIM

THE break in the long spell of hot weather fortunately arrived soon enough to save the efforts of our amateur horticulturists ; everything in the garden, it seems, is lovely, the raspberries as well as the weeds, and the flowers in the Park make certainly a most attractive setting to the lawns. Not only the vegetables were saved by the rain, but also that sturdy band of workmen who laboured all through the heat and dust to demolish the remains of the Counting House. It is difficult to understand how they were saved from heat stroke, but perhaps a row of salvaged deck-chairs and the water-tap at the foot of Thomas Guy's statue provide the answer. Thomas Guy himself has an ugly glint these days in the one eye that peeps out from his shroud of sandbags ; perhaps he does not appreciate the splendid vista of London Bridge Station that is now enforced upon him, or perhaps he would rather greet the gaze of the populace of Maze Pond as his true self and not as a heap of sand and rotting canvas.

◆

An interesting sidelight upon the country's conduct of its national affairs is revealed by the fact that the only two serious attempts to regularise the trade in patent medicines in this country should have been instituted, the one during the last war, and the other during this war. The introduction of the present Bill may or may not, as has been suggested, have been promoted for reasons financial rather than medical or moral, but, nevertheless, the Bill is of extreme interest and importance to the medical profession. It is obviously impracticable to expect in war time any great extension of the few tentative but praiseworthy efforts of the Government to educate the people to become health conscious by way of subtle advertisements, but any step towards the limitation of the large sums that are spent annually by patent drug firms in inducing the public to become medicine conscious is a step in the right direction. It will still remain possible for the unscrupulous to trade upon the misinformed public as in the past, to delay their seeking proper advice and treatment as promptly as they otherwise would and to promote much unnecessary self medication for non-existent complaints, but the list of diseases for which it is now forbidden to advertise cures is now considerably extended. Another important clause is that compelling the disclosure on the label of each remedy of the active ingredients embodied in it ; other ingredients and the quantities need not, however, be specified, so that plenty of opportunity for deception remains. In its various clauses the Bill certainly does not go as far as it should, but, should it become law without substantial modification, some progress will have been made, and the prospect will still remain that in more settled days to come further revision will eventually legalise substantially all of the recommendations of the Royal Commissions of 1914 and 1937.

◆

It is becoming increasingly difficult to keep in touch with the numerous old Guy's men and women who are now scattered all over the Empire in the fighting and other services. We are very grateful to hear items of news from any of them, both about themselves and also about others who are unlikely to read the *Gazette* ; in particular, it is a very great help if all changes of address or new appointments are notified.

◆

We are very pleased to congratulate Mr. Blaikeley upon his appointment as Assistant Obstetric Surgeon to the Hospital.

Meckel's Diverticulum

By N. L. Eckhoff, M.S.

YOU will all remember from your lessons in anatomy that during the early weeks of development of the human embryo the primitive intestine is connected to the yolk sac by a channel called the vitello-intestinal duct, and that this usually disappears. But in about 2 per cent. of individuals it persists in some part and is usually called Meckel's diverticulum. You will remember that it is usually about two inches long and is found about two feet proximal to the ileocœcal sphincter. But you may not remember that it always projects from the antimesenteric border, as you would expect from its anatomical derivation, and that this enables it to be distinguished from other diverticula of the small intestine which are usually multiple and related to the mesenteric border; nor that the remnants of the vitelline artery may be seen running down the surface of the diverticulum.

It may then persist as a blind tube always of the same lumen as the surrounding intestine. It does not always come off at right-angles to the intestine, but may lie in such a way as appears to make it the continuation of the same, with an angulation and slight constriction of the succeeding portion. The diverticulum itself may become conical, bulbous or spherical in shape or it may be constricted in some part, with dilatations above and below.

The possession of a Meckel's diverticulum leaves the individual liable to certain hazards.

I. *Acute Inflammation.*

Case 1.—Many years ago I remember being called out to St. John's, Lewisham, to see a young man who had all the symptoms and signs of acute appendicitis. In addition to the usual examination I put a finger into his rectum. I have often told you how important a rectal examination can be. On this occasion I felt a swelling about the size and shape of a decent sausage, which was tender to the touch. I thought this might be a very distended pelvic appendix, but at operation I found a Meckel's diverticulum of the size described in a state of acute inflammation. This was removed and he did well.

Case 2.—When I was Registrar to Mr. Turner we saw together a small boy of ten who again presented all the signs of acute appendicitis. I can well remember how the boy nearly deceived us by the fact that during the abdominal examination he did not flicker an eyelid. But the involuntary rigidity of his abdomen led us to operate and we later found that he had bitten a hole right through his tongue rather than reveal any sign of emotion on examination. His case is described in the Reports. I found a Meckel's diverticulum attached at one end to the intestine, at the other to the umbilicus. There was a tight constriction about the middle and the distal (umbilical) half was completely gangrenous.

Mr. Turner was very interested in the case, for he had previously reviewed all cases at Guy's between 1885 and 1905, and he suggested that the one point in the history that might have given us a clue was the fact that the little lad had had previous attacks of pain, and that these pains were made worse by standing or stretching but considerably relieved by doubling up the legs.

II. *Intussusception of a Meckel's Diverticulum.*

Case 3.—The interesting feature of this case was that I was called in for the first time from my bed some five miles away after the abdomen had been opened, as the operating surgeon had some difficulty in making out the nature of the lump found inside. The history was as follows:

D. L., a boy aged ten, was stricken at noon on July 21st, 1940, with acute abdominal pain, and vomited twice. He later had two stools, the second of which was rather loose, but neither contained any blood. On examination later in the day there was tenderness and fulness in the right iliac fossa, but no actual lump was discovered. P.T.R. Normal.

Operation was performed at 10 p.m. the same day. There was free fluid in the abdominal cavity and a softish lump was found in the right iliac fossa, and it was clear that this represented something inside the lumen of the cæcum. Running from the left of this lump was a hard cord-like structure, which could be traced back in a curve to the posterior abdominal wall, making delivery of the lower ileum exceeding difficult. When a few loops had been visualised the point of entrance of an intussusception was found, and it now became clear that the cord-like band was the mesentery of the ileum, stretched to the full by being taken up in the invagination. An attempt is made to illustrate this in the picture (Fig. 1).

Reduction by pressure at the apex of the intussusception was extremely difficult, owing to the fact that the lump in the cæcum was considerably in excess of the small lumen of the ileo-cæcal sphincter, but when this was finally accomplished, a Meckel's diverticulum, invaginated upon itself, was found to have been the starting point. No tumour was found at its apex.

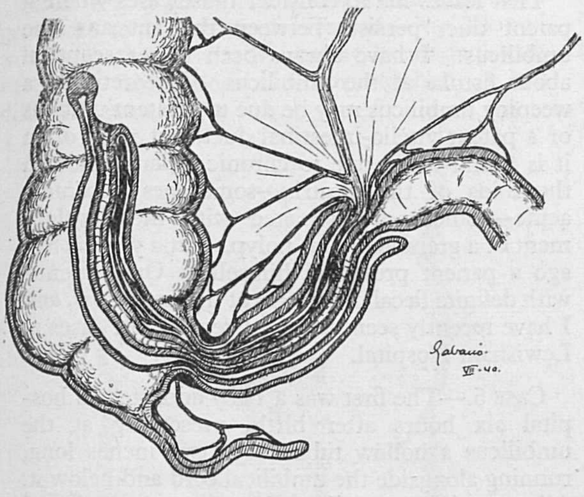


Fig. 1.
Diagramatic representation of condition found, showing traction on vessels in mesentery.

As the intestine involved in the intussusception was viable but somewhat bruised by the difficulty of the reduction, it was thought simpler to resect it in one piece than to resect the diverticulum only, and run the risk of ileus. The portion resected is seen in the diagram (Fig. 2), and the reconstituted intussusception in the photograph (Fig. 3).

After operation the temperature rose to 101 F., and the pulse to 120. Apart from some distension and vomiting on the third day, which ceased following a good result with each of two enemata, the boy made a good recovery. The specimen is in the Gordon Museum.

Intussusception originating in a Meckel's diverticulum is not a very rare condition, and Harkins (1933) has studied 160 cases from the literature, adding two of his own and an extensive bibliography. The full clinical data are not recorded in every case, but the following observations can be made.

The average age was thirteen years, with a four-to-one preponderance in males. Vomiting, colic and abdominal tenderness were present in practically all cases. Abdominal rigidity, blood per rectum and a lump in the right lower quadrant were present in about half the cases. (In the more common varieties of intussusception the lump is usually in the hypochondrium or left side of the abdomen.) Fever was less common. The average duration of the illness was 81.6 hours, and a reasonable number had previous history of pain. Gangrene was present in about four out of seven, and reduction was not possible in a great number. Resection of the diverticulum alone was performed in about 40 per cent. and resection of intestine in about 60 per cent. Recovery occurred in less than half the reported cases.

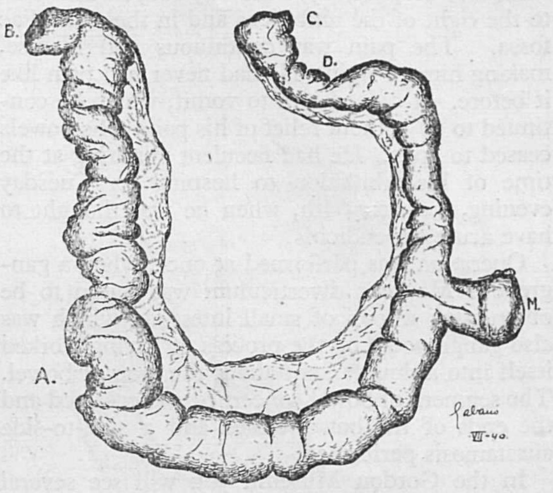


Fig. 2.
Portion resected. The points A, B, C, D, and M, correspond with these points in Fig. 3.

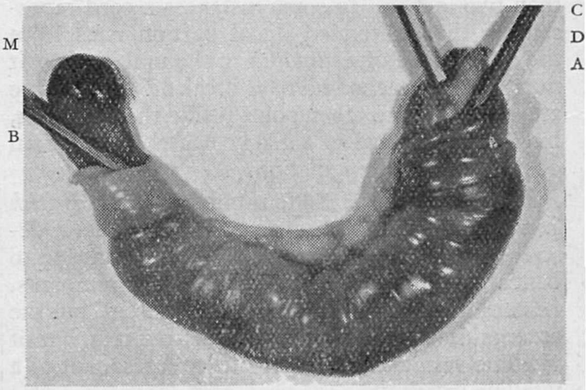


Fig. 3.
Intussusception reconstituted as far as possible.

The interesting features of this case are the short history, the difficulty of elucidating the nature of the lump when the abdomen was opened owing to the fixation produced by the shortened mesentery, and the great difficulty of reduction through the ileo-cæcal sphincter.

Strangulation by Meckel's diverticulum.

There was recently at Lewisham Hospital a man with the following interesting history:

CASE 4.—W. H., aged seventy-four. No definite history of dyspepsia, vomiting or trouble with the bowels throughout the whole of a hard-working life. He said he had very occasionally had vague abdominal discomfort for possibly a day at a time relieved by drinking soda-water or by some other simple remedy.

At 4.30 on Monday, February 3rd, he had pain to the right of the umbilicus and in the right iliac fossa. The pain was continuous and intense, making him go rigid. He had never had pain like it before. It caused him to vomit, which he continued to do without relief of his pain. His bowels ceased to open. He had fæculent vomiting at the time of his admission to hospital on Tuesday evening, February 4th, when he was thought to have acute appendicitis.

Operation was performed at once, when a gangrenous Meckel's diverticulum was found to be obstructing a loop of small intestine (which was also gangrenous) by the process of having worked itself into a double knot about the loop of bowel. The segment of bowel concerned was resected and the ends of the bowel closed and a side-to-side anastamosis performed.

In the Gordon Museum you will see several specimens showing this particular complication. In order to tie itself in a knot round a piece or loop of intestine a diverticulum must be rather longer than two inches. In some instances a cord representing the obliterated distal portion runs from the apex of the diverticulum to the umbilicus. It may remain attached here, or break off and become attached to some other point inside the abdomen, but in either case is a likely cause of intestinal obstruction or strangulation.

In the January, 1940, number of the *British Journal of Surgery* Buchanan and Wapshaw described two cases of intestinal obstruction due to bands thought to be due to vitelline remnants. In neither case was a diverticulum present, but the authors thought that one was due to a remnant of vitelline vein and the other due to a remnant of a vitelline artery.

Other Complications.

I have described complications that may arise in a diverticulum, and those that may arise if part or the whole of the vitello-intestinal duct is replaced by a fibrous cord. Cystic dilatation may occur in any part of the tract and neoplasia has been described, but this must be very rare, as is all neoplasia in the small gut. I should mention that although the diverticulum is usually composed of the same layers as a normal piece of ileum, metaplasia can occur in the mucous-membrane so that pancreatic remnants or collections of oxyntic cells are found, the latter sometimes leading to peptic ulceration with the dangers of hæmorrhage and perforation.

Umbilical Fistula.

That leaves me to consider those cases where a patent duct persists between the gut and the umbilicus. I have always been rather sceptical about fistulæ at the umbilicus. Theoretically a weeping umbilicus may be due to a patent urachus or a patent vitello-intestinal duct, but most often it is found to be due to chronic inflammation in the folds of the cicatrix—sometimes becoming acute—sometimes associated with the development of a granulomatous polyp. But a year or two ago a patient presented himself at Out-patients' with definite fæcal discharges at the umbilicus, and I have recently seen two most remarkable cases at Lewisham Hospital.

CASE 5.—The first was a baby admitted to hospital six hours after birth, presenting at the umbilicus a hollow tube about two inches long, running alongside the umbilical cord and below it. All meconium came from the tube at its end, and none per rectum. Although the nature of the abnormality was fairly clear the following investigations were carried out by the resident staff:

1. Barium by mouth all came out at the fistula.
2. Barium per rectum passed round to a normal highly placed cæcum and none came out of the fistula.
3. Lipiodol run into the fistula rapidly entered the cæcum and larger bowel.

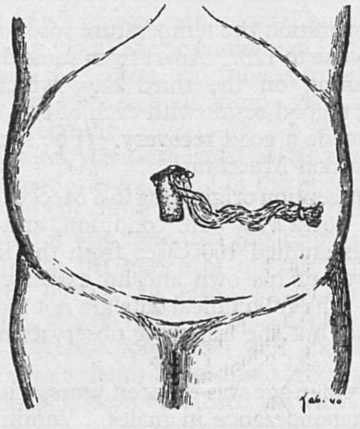


Fig. 4.
Condition at birth: umbilical cord and persistent duct seen.

This confirmed the nature of the condition. As the child was losing weight rapidly a catgut purse-string stitch was tied round the tube, and it was not until after this that I saw the baby.

Now stools began to pass the normal way and only occasional bile-stained fluid came through the fistula. At the same time the projecting part shrank in size and the infant began to look normal, though the weight was under six pounds.

After three weeks the mother was anxious to get home to her other children and was allowed to take the baby, who was partly breast fed, with her, with instructions to return at once if any difficulty arose.

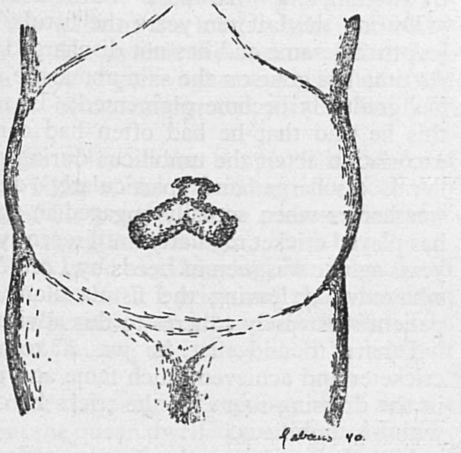


Fig. 5.
Condition at fifth week. T-shaped prolapse from umbilicus.

Figs. 6, 7, and 8.
Development of prolapse.

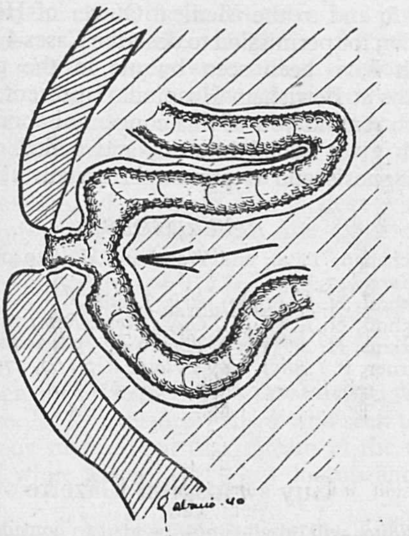


Fig. 6.

Fifteen days later the baby was brought back with the most remarkable plum-coloured inverted T-shaped tumour presenting at the umbilicus. This had started to appear twelve hours before, but the mother had delayed bringing the child to hospital. It was clear that this was a type of prolapse, but its exact anatomy caused much speculation. If one visualises a patent duct making a T-shaped junction with the intestine it is clear that when this turns inside out it will make an inverted T. I have got Dr. Gabarro to make drawings of the stages in the process which explain the mechanism.

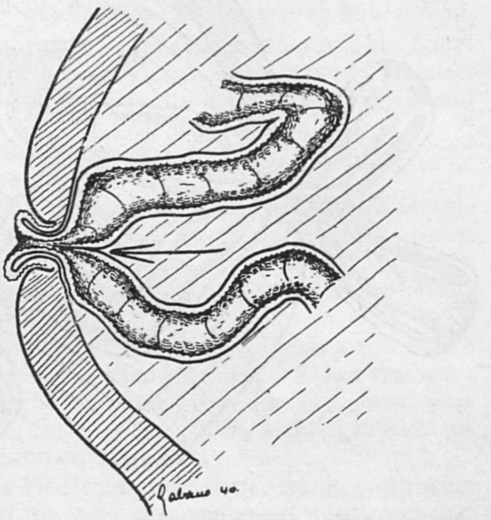


Fig. 7.

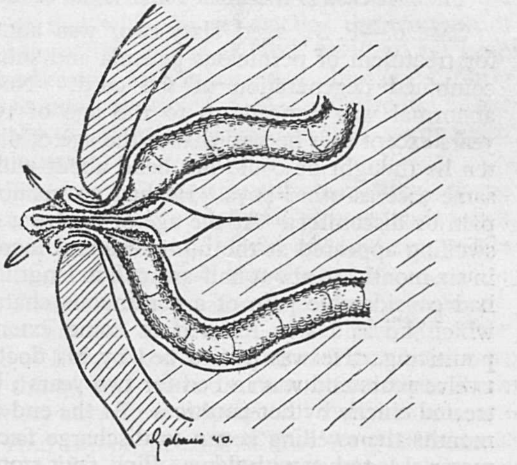


Fig. 8.

As it was impossible to reduce the prolapse by taxis I was asked to operate on the baby. Through a small incision reduction was easily effected by pressure outside and *gentle* traction within, and the patent duct removed. But the child, still much below normal birth weight, collapsed twenty-four hours later and died, despite all measures to save it. At postmortem the gut was healthy and there was no peritonitis. This case is described in the *British Journal of Surgery*, 1941, April number, p. 628. (Figs. 4 to 9.)

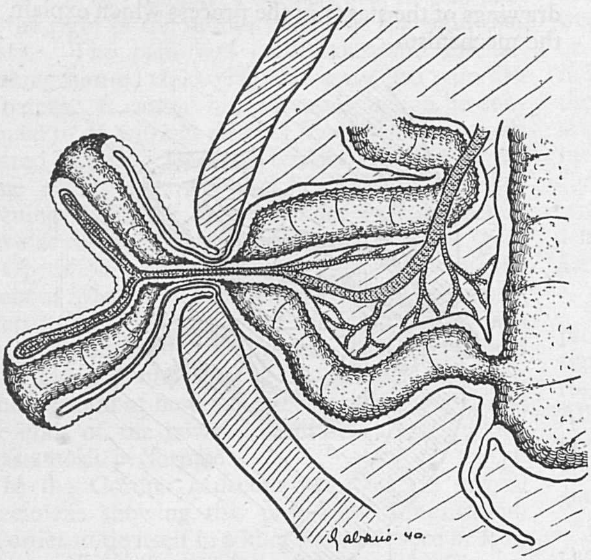


Fig. 9.
Fully developed condition with turgescence of evaginated loops.

The last case is the most remarkable of all. :

Case 6.—P. S., aged sixty-two, was admitted for treatment of pernicious anæmia and subacute combined degeneration of the cord. Nothing abnormal was noticed up to the age of twelve years except that he said that at the age of nine or ten he thought he could not bend about with the same ease as other boys. He had no memory of pain or discomfort. At the age of twelve a small swelling appeared at the umbilicus and increased in six months to about half-an-inch in length. He had considerable pain of a continuous character, which he said was relieved to some extent by poulticing. He was put to bed by his doctor at twelve years and was in bed for two years , being treated chiefly by hot poultices. At the end of six months the swelling began to discharge fæculent material together with flatus. Pips, fruit stones or fruit skin swallowed fourteen to sixteen hours before would be extruded, though sometimes a lapse of two or three days would occur before extruding some foreign body which had apparently obstructed the fistula. During such a time he would have considerable discomfort which he would attempt to relieve, with some success, by manipulating his abdomen to squeeze the pip out or by probing the fistula. He had had discharge from the fistula practically continuously, though perhaps five or six times a year the fistula would close for a variable period up to as much as two months, only to be reopened by the passage of some indigestible material with considerable pain. These reopenings of the fistula were accompanied by swelling and " hardness " of the abdomen.

During the last ten years the fistula had been less troublesome and has not discharged so much. As time has gone on the skin about the umbilicus has gradually become pigmented. In relation to this he said that he had often had considerable excoriation about the umbilicus during periods of fæcal discharge and particularly during hot weather or when actually engaged in sport. (He has played cricket regularly until recently.) Thirty years ago he was seen in Leeds by Lord Moynihan who advised leaving the fistula alone, and the patient *still* wisely adheres to this advice.

I have to add that he was a keen amateur cricketer and achieved much fame and popularity in the dressing-room for the tricks he could play with his umbilicus.

His X-ray shows that many coils of small intestine appear to be drawn up towards the umbilicus, as they may well be from the repeated attacks of inflammation that have occurred in this region.

I am indebted to Messrs. John Wright, of Bristol, for permission to use the illustrations to Case 5, and to the Medical Officer of Health for London for permission to describe Cases 4, 5 and 6, which have been seen by me in the past few months at Lewisham Hospital. I present these to you to remind you of this congenital abnormality, which gives added interest, and added difficulty in diagnosis and treatment in certain abdominal cases.

REFERENCES

Buchanan, T. S., and Wapshaw, H. (1940), *Brit. J. Surg.*, 27, 533.
Eckhoff, N. L. (1940), *Brit. J. Surg.*
Eckhoff, N. L. (1936), *Guy's Hosp. Rep.*, 76, 429.
Harkins, H. N. (1933), *Ann. Surg.*, 98, 1070.
Turner, P. (1885), *Guy's Hosp. Rep.*, 60, 279.
Ibid. (1905), *Guy's Hosp. Rep.*, 65, 33.

Guy's Hospital Gazette

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Sector News

Guy's Letter

AND it came to pass in the years of the war with Hit and Muss, that there was a certain temple where dwelled the sons of Guy.

2 And the walls of the temple were defiled by the wrath of Hit, so that the wise men had their abode in a place of great ugliness whose name was Nuff, which being interpreted means, built by chariots.

3 Now the ruler of the temple, Bish the son of Op, the King of the Hormones, put fear into the hearts of his people, for he possessed strange powers over the glands of man.

4 And Bish cried aloud saying, Him that doeth not my will, him will I prick and make woman; and she that heareth not my command shall take the likeness of man; and many shall be but half and half.

5 And over the daughters of Guy there ruled a queen; but the queen dwelled not with her people, for she lived in the finest court in the house of Nuff.

6 And the queen was perfumed with great price, and it was better than the scent of hops; and ofttimes some of the elders of the men that lived in the house of Nuff visited the queen in her court, and offered unto her flowers of much beauty.

7 Now the elders of the daughters of Guy were called sisters, and the daughters feared their sisters; and the sisters were full of righteousness and took much pleasure in themselves for they said, the one to another, What manner of man is he who doeth not our bidding.

8 But there rose up from the sons of Guy, Abe the Anæsthite, who putteth men to sleep with the odours of strange vials; and Abe exhorted his brothers, saying, Three whole days was I in the Wildernesse where saw I a land ruled by women, and the chief of the women had a title of great pomp such as had not been heard by the people of Guy.

9 Then Abe smote his breast saying, Come, therefore, let us overthrow them who seek to rule us; let us silence then that scream in the courts of Nuff while the sons of Guy do sup and take bread.

10 But men heeded not the words of Abe the Anæsthite, neither did they his bidding: so the sisters continued, and wrought their will and made their sounds.

11 And there were midwives in the temple of Guy and the name of the one was Gib, and the other was called Mac; and they were men of little speech.

12 Nevertheless it came to pass that Gib said unto Mac, Hail; and, after communing within for a space Mac answered, saying Um: yet opened they not their mouths again for three score days.

13 And there was another named John whose surname was Blaikley; and he was an honest man.

14 And the rulers of Guy said unto John, Stand forth, for thou art chosen of us to be of the elect and thou shalt enter into the company of Gib and Mac.

15 And the sons and daughters of Guy rejoiced and were glad.

16 And, week by week, there came to the temple Tub, whose voice was the voice of thunder, so that some said that the walls of the temple had fallen at the sound of his greeting to a dweller in the house of Nuff.

17 Now there was a prince of great might whose voice was not of thunder but like unto a trumpet; and, day by day behold, at the fifth hour after noontide, the Prince of Nuff, arrayed in glorious apparel, did visit the sick.

18 But Hed went not alone, for in procession followed the wise men and some were eager and some were bored.

19 Now the seasons were hot and, lo, Samuel whose other name was Wass, the son of Truss, was sore afflicted by the heat and burden of the day, so that while he yet swelled the triumph of the train of the Prince of Nuff, he lifted his head to the heavens and in patient wailing cried, Gee: and Samuel multipled Gee a hundredfold, but Hed the son of At, the Prince of Nuff, said nought in sympathy.

20 There was a certain craftsman, Eck, of the house of Hoff in the land of Grinstead; and Eck made new images out of old and didst graft the flesh of one upon the bones of another.

21 Then did he breathe into them the breath of new life and when they awoke they heard the voice of Eck, saying, Behold it is I that have done this thing, and there is none other that doeth likewise, nay, there is none.

22 And two of the sons of Guy hung their heads and were ashamed, for Ers and Lloydskin were sore afraid.

23 Yet there were others of good report of whom no evil was uttered; so were French and Till much blessed and didst sell remedies.

24 Now Pompo, the son of Hippers and brother of Clotty, was a man of much talking so that some said, He is a wine-bibber, and others, He maketh prayers.

25 But Pompo, the son of Hippers and brother of Clotty, was banished to the land of Kent, whereof it is said, snowballs melteth not.

26 And the children of Guy numbered among themselves men from heathen lands for there was found among them Er the son of Ic of the house of Davies: and Er was much pleased with Ic, and Ic was pleased with Er, and both paid tribute to the house of Davies in the land of Shang, which is called Hai.

27 And there was Silas the savage from a far off isle; and Ali the naked from the hot places.

28 Now about this time Mah, a child of Tin, took unto himself a wife and there was rejoicing in the temple and much damage was done.

29 And others there were who were scholars, and sought not the ways of other men; Grant the brother of Reeve, the brother of Neville, the sons of Shock lived apart from the House of Nuff: likewise so didst Gibette the son of Gath and tender of mustard.

30 And this is the record of the children of Guy.

R. T. H.

Pembury Letter

THE last fortnight has seen the periodical change over of students. We hope that those who have newly arrived will find themselves sufficiently occupied. We realise that they will not have the same chance of studying pathology as elsewhere in the sector; but the clinical teaching and material is at least equal to that anywhere, and some knowledge of clinical medicine and surgery will be found to come in handy by those who wish to treat their patient in a bed rather than study him in a bottle.

A number of nurses have also recently left us and their departure was made the occasion for a dance which proved to be one of the events of the season. It was given by three of those who were leaving, to whom our thanks are due for their initiative and generosity, and held in a local hall filled to overflowing with the strains of the Sandrock Six. The success of the evening was undoubted and the party was still in full swing when it had to be brought to an end. It is not surprising, therefore, that at midnight, when all good nurses should have been in bed, the spirit should have rebelled, perhaps in the hope that on such an occasion authority might follow Justice and, with scales at hand, cover her eyes. But Authority was all eyes that night and the empty beds in the nurses' home had attention that the occupied ones in the wards seldom get. The consequence was they had to see Matron, and the world said: "What a pity!"

On a recent Monday occurred a monumental cricket match on the village pitch between a village team fresh from the "Camden" and a hospital team not so fresh from the "Camden." Each side was allowed to bat for up to twenty-two overs, and each man bowled for two. There was no doubt about which team would win, but it lost all the same, and we congratulate the hospital on its success.

G. L. L. R.

Orpington Letter

ORPINGTON is a queer place, as readers of previous letters may have guessed. Within the fairly confined walls of the Hospital a vast panorama of life is displayed and many and different types of humanity can be seen; for where else would one find the Guy's Nursing staff, the Public Assistance Institute inmates, the Military patients, the Air Force and the W.A.A.F.s, the Guy's Medical staff, the Massage Department, and the ancillary departments (very important, I assure you!), the Kent County Council Administration and the R.A.M.C. all working in harmony or, at any rate, with little more than sub-clinical disharmony?

As one sits in the fire-spotters' box on the roof of the Theatre one is reminded of the words of Taine: "Quatre sortes de gens sont dans le monde: les amoreux, les ambitieux, les observateux et les imbéciles. Les plus heureux sont les imbéciles."

Before another letter appears changes will have taken place throughout the Sector, for the three-monthly crisis is again upon us, and those who rule us from high places will have determined the forthcoming appointments. We all realise that house men must be birds of passage, but might we plead that the three-monthly periods begin at a date farther removed from the sitting of the Medical Committee, in order that departing house officers have more notice of the close of their appointment.

B. D. J.

The Wildernesse Letter

JULY 9TH was a very sunny day with the faintest breeze from the south-east. The hospital and grounds looked at their best. At about 2 p.m. the visitors began to arrive, and we were extremely glad to see so many members of the Guy's staff gathered together from the base hospitals. Lord Nuffield, Mrs. Elsworthy and Mrs. Morrow were among the guests who were received by Lord Goschen in the garden; and Whitbread, who was in his full regalia, announcing them added further wholesome flavouring of Guy's to the garden-party. After seeing round the hospital a strawberry tea was provided on the lawn, while Press men (possibly hired by Lord Woolton) hovered in the background. Sister Foster Smith is caterer as well as theatre sister.

After last week-end one of the sisters came on duty with a black eye. We had noticed that some of the piles of linen that had arrived had the laundry mark " Wild. Guys. Sisters," and we wondered. Now we realise why Sister Alice has her hands full with the Nurses' Home.

" Big stuff " is being done in the way of surgery. When we say that a patient was returned to the ward last week with a bunch of four tubes coming out through the abdominal wall, you will realise at once that it was a duodenostomy *cum* cholecystostomy *cum* choledochostomy with drainage of the peritoneal cavity.

We are fortunate in having someone from north of the Border as night sister. Periodically, when the night cook gets tired of the place and leaves without notice, it falls to the lot of Sister Annand to make the porridge—and it's excellent.

Three American nurses, who have come through fire and water to help us, are due to arrive to-day; they were torpedoed while crossing the " puddle." We give them a warm welcome; a further report will be given later.

D. M. J.

Farnborough Letter

EXAMINATION results seem to be greatly in the news at the present; we rejoice with those whose visits to Queen Square have been requited and commiserate with those less fortunate. We hear that the results in the recent State Nursing Examinations have been particularly gratifying, the Guy's unit here having secured 100 per cent. pass. We congratulate Sister Florence and the nurses concerned on this very creditable achievement.

Community feeding has now been in operation here for three weeks, and, on the whole, we think the change has been for the better. Under the new arrangement the medical staff, the nursing staff, the students on duty and possibly some others (the hall is so large that accurate observation of its depth is difficult) take meals together in a large central hall. During the first week the medical staff was screened off from the popular gaze by a kind of arras, but after the expiration of that period it was presumably decided that their table manners were sufficiently presentable to justify the removal of the barrier—for it suddenly disappeared and has not been seen since.

We are pleased to see that Mr. Gerald Thomas has returned from his enforced stay at the local Fever Hospital and trust that he will pick up no more childish complaints; he looks well enough to discourage any micro-organism.

V. G.

Sport

Cricket

GUY'S v. BECKENHAM.

At Beckenham on 28th June. *Lost by* 52 *runs.* Guy's, 133; Beckenham, 185 (R. L. Skea, 5 wickets for 45 runs; J. H. Knight, 3 wickets for 48 runs; T. R. Wooldridge, 2 wickets for 30 runs).

Guy's.

A. V. Hurst, c. Auld, b. Hill	21
P. Brown, b. Auld	0
C. S. Gardner, c. Bulkeley, b. Auld	7
S. N. Cole, c. Somerville, b. Hill	27
S. G. Beaton, c. Hill, b. Blaker	9
J. R. Lauder, hit wicket, b. Cardew	0
R. L. Skea, run out	2
Pritchard, b. Cardew	1
T. R. Wooldridge, b. Hill	18
D. M. Strathie, not out	22
J. H. H. Knight, b. Cardew	8
Extras	3
Total	133

GUY'S v. THE PRESS.

At Honor Oak Park on 29th June. *Won by* 97 *runs.* Guy's, 173; The Press, 76. (C. B. Clarke, 5 wickets for 18 runs; J. H. Knight, 5 wickets for 52 runs).

Guy's.

A. V. Hurst, c. Glennie, b. Frend	63
H. A. Thomas, c. Palmer, b. Burton	11
E. G. Murphy, b. Frend	12
C. B. Clarke, not out	41
S. G. Beaton, l.b.w., b. Price	5
S. N. Cole, b. Gaster	10
J. R. Lauder, b. Price	5
T. R. Wooldridge, c. Price, b. Gaster	3
G. Hildick-Smith, c. Frend, b. Price	15
R. L. Skea, b. Price	1
J. H. H. Knight, b. Price	0
Extras	7
Total	173

Hospital Information, etc.

Notice

THE SOCIETY OF APOTHECARIES OF LONDON

The Society of Apothecaries of London Examinations for August are as follows :—

Surgery.—August 11th, 13th, 14th.

Medicine, Pathology and Forensic Medicine.—August 18th, 20th, 21st.

Midwifery.—August 19th, 20th, 21st, 22nd.

Pass List

CONJOINT BOARD.

FIRST EXAMINATION.

June, 1941.

Anatomy.

B. C. Lee
P. C. Leeson
W. E. Macbean

Physiology.

A. B. Dickie
B. C. Lee
P. C. Leeson
J. C. Matthews
A. B. Vauscolina
G. R. Wotton

Pharmacology.

P. F. E. Brown
E. G. Cook
O. M. Jonathan
H. P. Merrick
J. K. Ogden
B. H. Wilshire
R. M. Woodside
L. P. S. Wright

UNIVERSITY OF CAMBRIDGE.

MEDICAL AND SURGICAL DEGREES.

Easter Term, 1941.

Pharmacology.

W. E. S. Bain
G. H. Dhenin
F. K. Lau
T. L. T. Lewis
J. S. Pegum
A. J. Rook
W. H. Trethowan
R. J. Walker

Papers by Guy's Men

Macintosh, R. R., and Another. Improved apparatus for continuous intravenous anæsthesia. *Lancet*, 1941, ii, 10.

——— and Another. The quantitative administration of ether vapour : Crystals as a heat reservoir. *Ibid.*, 61.

——— and Others. The Oxford Vaporiser No. 1. Details of construction—Operation of the vaporiser. *Ibid.*, 62.

Pearson, R. S. Bruce, and Others. Local treatment of Burns. *Brit. Med. J.*, 1941, ii, 41.

Cameron, H. C. Fifty years' progress in Pædiatrics : Tuberculosis. *Clin. J.*, 1941, **70**, 169.

Smith, R. E. The undescended testicle. *Lancet*, 1941, i, 747.

Wass, S. H. Di-iodotyrosine in treatment of Graves's disease. *Lancet*, 1941, ii, 34.

Clarke, Ruscoe and Another. Pain in acute appendicitis. *Ibid.*, 39.

Changes of Address

H. M. Brown, Major R.A.M.C., D.A.D.M.S., Hampshire Division, Home Forces.

S. W. Beales, Captain A.D. Corps, c/o Barclays' Bank, Brecon, South Wales.

L. H. Boyd, Flying Officer R.A.F.—ZXOZ, A.P.O. 1200 Headquarters R.A.F.

E. H. Koerner, Major R.A.M.C., Royal Herbert Hospital, Woolwich.

G. S. Loader, L.D.S., R.C.S., 123, Gloucester Place, W.1 (Tel. : Welbeck 2494).

C. F. Morrison, Major R.A.M.C., Medical Branch Headquarters, Eastern Command, Home Forces.

J. N. Martin, Major R.A.M.C., S.M.O., Southern Area, 2nd A.A. Division.

A. S. Rudd, Captain R.A.M.C., 1st R.T.R., Middle East Forces.

L. F. W. Salmon, Major R.A.M.C., D.A.D.M.S., Headquarters 5th Division, Home Forces.

J. A. Wakes Miller, Major R.A.M.C., 17th C.C.S., Middle East Forces.

Mentioned in Despatches

Supplement to the *London Gazette* published on July 1st, 1941. For good services in the last six months or more of war :

Surg.-Lieut. Richard Constant Ponder, R.N.V.R.

Awards

Miss R. C. Shackles, Principal Matron T.A.N.S., and Matron of the Bath Royal United Hospital, has been awarded the Royal Red Cross First Class.

Appointments

Miss E. M. L. Cawthorne has been appointed Matron of Royal Alexandra Hospital for Sick Children, Brighton.

Marriages

TICEHURST—BOWSER.—On July 5th, 1941, at Holy Trinity Church, Roehampton, London, Lieut. Rowland Gerald Ticehurst, R.A.M.C., younger son of Dr. and Mrs. G. A. Ticehurst, of St. Leonards-on-Sea, Sussex, to Mary Bowser.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry
and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *9th August* 1941 *Number* 1384

PASSIM

NO matter what the field, the key to medical progress is accurately recorded observation; this statement applies both to laboratory research and clinical practice. It is much too common for individuals to base their claims for the most part upon impressions, especially when referring to advances in treatment. At Guy's the necessity for and value of history-taking is impressed upon the student even before he enters the wards, and when he does become a ward clerk he enjoys the unique privilege, which no other hospital grants its students, of taking the patient's history, recording his own physical findings and following up the course of his patient's illness. This system has not been without criticism, for there were many who claimed that the ward clerks were too junior for such important responsibilities and that the qualified house officers ought to carry them out.

With the advent of war this latter state of affairs has come to pass, so that now it is quite common for a patient to pass through a series of doctors' hands without coming into direct contact with a medical student. For example, a man aged 25–30 complaining of abdominal discomfort consults his panel doctor; the harrassed general practitioner has little time for extensive note-taking and, if the patient fails to respond to some palliative medicines, he is sent up to hospital with a few descriptive words sometimes inscribed on the back of a visiting-card, sometimes on a small sheet of notepaper. When seen at Out-patients' a short pointed history and a few details of the physical findings are put down on the out-patient letter and, perhaps, one or two special investigations are carried out. However, as is quite commonly the case, this type of patient does not respond to out-patient treatment and his admission to hospital is advised. In these blitz-free days it is likely that the patient will find himself in one of the London hospitals for the first week at least; here the house officer on duty records a more detailed history and physical examination and orders an intensive series of investigations. It is most unusual (in fact, for the majority of cases one can say never) for daily observations of the patient's progress to be recorded; so true is this statement that in some hospitals it has been found necessary to issue an order compelling the house officers to write " something " on the case sheet at least once a week. After the initial phase of interest has passed off, evacuation of the patient is thought necessary, and a short duplicated summary of the case is then written and forwarded with the patient.

On receiving this case it is quite understandable that the house officers at the base hospital regards it with mixed feelings and that usually is content with a sketchy surface type history. After a very variable time the patient is finally considered ready for discharge. At this juncture the house officer writes out a very brief outline of the case on a card which is later duplicated; in addition to this, if he feels industrious enough, he will write a short note for the patient to take back to his panel doctor.

In the course of his adventures this patient will have been seen in succession by panel doctor, out-patient officer, out-patient physician, out-patient registrar, radiologist, chemical pathologist, house officer, registrar and consultant, and, finally, a duplication of most of these at the base hospital before being returned to the panel doctor; besides this procession of doctors, no fewer than eleven separate reports will have been written, each one of which is supposed to be an authentic and descriptive account of the patient's disease, and it is safe to say that, with few exceptions, none of them are of real clinical or statistical value.

There ought to be an easy solution to this state of affairs because, as it is, the records are useless and, as a whole, not worth saving for reference purposes. Since the rather excessive reduplication of medical attention is a problem in itself, it would be best if one doctor in the series were made responsible for a complete and accurate account of the patient's history. In civilian cases this should be the house officer who first admits the patient to the ward and looks after him or her during the acute phase of the illness. The best type of case sheet for this purpose is blank folded paper, type commonly used at Guy's Hospital. The kind of case sheet with the headings of the various systems listed in order with two or three lines left between each cannot be too strongly deprecated. Once completed, the same case paper ought to follow the patient to the base hospital and remain with him until the day of his discharge, when it could be returned to a central registry depot where the records of the whole sector are classified and stored. The system where a duplicated summary of the case is made each time the patient is moved is not a good one because it means that the doctor at the receiving end must start all over again and try to get some idea of what has already transpired. If the patient was unconscious or delirius during the early part of his illness, then it is manifestly impossible to get a complete and relevant account which is bad from every point of view.

With regard to air-raid victims the position is somewhat different. While the only way to measure the effect of one's management of such a case is by intimate and detailed observations recorded almost every fifteen minutes, this task will have to remain in the hands of a few people specially allocated for this duty. The remainder of us will simply have to get on with the job and strive to keep the decks cleared and prepared for the arrival of more casualties. Nevertheless, everyone should strive to collect as many facts as the pressure of work will allow and, when the number of cases is comparatively small, every effort should be made to learn as much as possible from each patient by clinical observation and whatever special tests are indicated.

◆

THIS week we say good-bye to the author of Guy's letter, known to us all as " R. T. H." His series of brilliant missives was climaxed in the last issue by a clever effort done in biblical style. He has achieved a large and growing following and, in saying farewell, we wish him continued success in the Indian Medical Service.

Child Guidance

A Clinical Lecture delivered by H. C. Cameron, Esq., F.R.C.P.

IN no part of child study has there been so great a development as that which concerns his response to management and environment. The present century had advanced some way before it was sufficiently realised that many disorders, till then regarded as of purely physical origin, were the outcome and reaction of psychological defects in the life of a child, and that psychiatric rather than medicinal treatment was necessary for their control.

My own experience, when about the year 1910 I first became especially interested in the disorders of children, convinced me of the need to attempt radically to alter the relative emphasis which was laid, in practice and in teaching, upon these two aspects of disease. In my out-patient practice there were to be met, more frequently then than at present, examples of gross organic disease such as rickets, infantile scurvy, rheumatism and pneumonia. But mingled with these, and in much greater numbers came children suffering from a variety of purely functional disturbances. Refusal of food, sleeplessness, constipation, frequency of micturition, enuresis and many other complaints seemed to me, upon anaylsis, less due to inherent defects in the child's health than to faults of management and injudicious handling. All children at some time reject food or wet the bed, but these back-slidings are trivial and transitory or are capable of being erected into the most formidable disorders according as they are dealt with, lightly or light-heartedly or with agitated insistence and undisguised pessimism. Even in these days, too, a proportion of children attended the Department for what might be called disorders of conduct. Many of these defects seemed to me to arise from the reaction of the child to a too obvious and persistent " maternal traction," and at a time when the paths of the pædetrician and the psychiatrist were still widely separated, borrowing a term from the vocabulary of the alienist of the day, I described them as due to " negativism."

In the first place, all children are very sensitive to what is said to them—that is, to their reputation in the family. What is expected of them, thought of them, feared for them, that they become. They have no knowledge of themselves. They see themselves in the eyes of others. And so it comes about that their behaviour and conduct in the hands of different persons is very often in strong contrast. Of one child, sent from home to school because she was so constantly unkind to her little brothers and sisters that their life had become impossible, though this reason was known only to her parents, it was reported at the end of the first term that the school had never had a child so " helpful with the little ones." We all know the dare-devil child who is constantly endangering his life by climbing to impossible heights, by putting out to sea in what he believes to be a raft, and so forth. It will generally be found that the parents of a child of this sort, though no doubt they reprove him and expostulate with him, are nevertheless obviously a little proud of his performance, clearly feeling that it shows him to be a child possessed of praiseworthy initiative and courage. As a rule, however, the common fault is just the opposite. The parental fear of the hundred and one accidents, which may and sometimes do befall children, even if that fear is not expressed in words, is sensed by the child so that the world may become for him a place full of dangers. A town-bred nurse afraid of cows may make every country walk a perilous adventure. If it is constantly said of a child in his hearing that he is difficult about his food, that he will not eat this or that, or that he has absolutely no appetite, refusal of food may well grow into a truly formidable difficulty.

But if children in this way are highly sensitive to what is said of them, they are, in general, apt to be much less responsive to what is said to them. No doubt all children should learn to obey. There are not a few parents who have no difficulty in securing obedience. Their word is law and the child obeys either from fear of punishment or because he instinctively feels that theirs is the stronger will. With such handling negativism does not develop. There are other confident and optimistic persons who take delight in their child's good qualities, who attach to him the reputation of obedience, who confidently expect, and in the result constantly obtain from the child, unquestioning acquiescence. Such parents, too, encounter no negativism. But with most of us things are apt to go less smoothly. With raised voice and uplifted forefinger we insist and our insistence produces only resistance. Shepherded in one direction the child appears determined to go the other. To forbid seems only to arouse desire. A constant and too obvious attempt to secure control and a constant failure to achieve it produces in most children this negatavistic reaction. A strong-minded woman with uplifted spoon, determined to administer the prescribed amount of food, will be met with closed jaws and an absolute refusal to swallow. Yet the same child may descend from his high-chair, after a long and ineffective struggle, and scavenge greedily among the crumbs on the floor. Of one such child I was told that he would probably not be alive, so great was his aversion from food, if it were not that when he went to the park to feed the ducks with a bag full of rather unpleasant crusts, he consumed the lot despite the protests of his nurse. A child's conduct seemed to me, in very great part, in this way to take its colour from its surroundings and often to express not so much his own undeveloped personality as the personalities, developed and complex, of those in charge of him.

The negatavistic child, prone to pit himself against too persistent attempts to shepherd and control, becomes, not infrequently, a study in all the symptoms of childish fatigue—restlessness, irritability, disturbed sleep, pallor, cardiac asthenia, amyotonia with postural defects and especially a tendency to suffer from bouts of prostration, pyrexia, vomiting, with ketonæmia, mucous diarrhœa or convulsions. The symptomology of nervous unrest in childhood was seen to be very rich and varied. Enuresis, pollakiuria, night terrors, sleep-walking, masturbation, thumb-sucking, nail-biting, air-swallowing, ticks and habit spasms of all sorts, states of unconsciousness, convulsions, persistent fears and phobias were to be regarded as of importance only because they were the outward manifestations of unrest, strain and maladjustment. If successful treatment was to be attained it became clear that it must be achieved through the mother and by means of her. Her difficulties must be understood and such explanation made to her as would enable her, if possible, to readjust her management and alter the harmful influences of the child's life.

The last ten years has seen an organised attempt to provide for the country a service of psychiatric help and advice for all parents and schoolmasters who may find themselves confronted with difficulties in the control of children. The Child Guidance Clinic originated in the United States of America, a country in which problems of child control have been sometimes, for a variety of reasons, unusually difficult. When, for example, the parents are foreign-speaking immigrants while the children grow up town-dwellers, speaking a different language, home life may well present unusual difficulties of adjustment. The work of the clinic is carried on by a psychiatrist, a psychologist and a trained home visitor working in close co-operation and consultation. The psychologist assesses the mental capacity of the child and contributes a complete psychological study of the case. Often much is learned by continuous observation of the child at play in a well-equipped play-room. The psychiatrist, with the reports of the psychologist and of the visitor before him, after interviewing the parents and examining the child, is then in as good a position as possible to read the riddle of the child's conduct and to devise means to better it.

By these more elaborate methods of investigation valuable contributions have been made to the study of child psychology and behaviour. In practice the full machinery of the Child Guidance Clinic is comparatively seldom necessary. The value of the clinic is precisely the value which is conferred on it by the presiding physician. The right man, experienced in such work, develops the power of detecting the sources of friction and strain and of convincing the parents of the need for the necessary adjustments. Often after no more than one or two interviews a situation which may have appeared formidable indeed to the family is completely controlled.

The response of a child to simple suggestion is habitually immediate and complete. To place the child in what Locke calls " a state of reputation " is very necessary. If he falls from it, his lapse must be temporary. He must be ostentatiously restored to it, for if he falls into bad repute, to that too he will live up. It is not surprising that children's conduct should change completely with a change to a better management and environment. The influences of the home cannot always be remoulded as we would wish them to be. That there are failures not a few, should not prevent us from appreciating how high is the proportion of success in work of this sort. It is no wonder that a psychiatrist, after exhausting and sometimes disappointing work among adults, may turn with relief to the problems of the more responsive child.

Besides the study and treatment of the maladjusted and delinquent child other problems of educational difficulty have been successfully attacked. Alexia or congenital word blindness, varying in degree from a complete to a partial inability to recognise printed words, has been found to be a not uncommon cause of failure at school. Since the mentally deficient child is defined as a child incapable of profiting from the instruction at an ordinary school ,it is not surprising that this defect has not infrequently led to unfortunate confusion. The alphabetical letter alone is recognised. No word springs whole into the child's consciousness. It can only be guessed at by a painful reconstruction of individual letters. Since Arabic numerals are not blended into a composite whole but are apprehended separetely, the difficulty does not extend to mathematics. The schoolteacher often fails to detect the inability because, at least in early years, a child may memorise his book and make a successful pretence of reading. In many cases the continuous urging and appeal to him to do what he is quite incapable of doing produces a state of agitation or unhappiness which may deprive him of all power of learning even the things in which his defect is not involved. More rarely we come across instances of the comparable defect of congenital word deafness. Stammering, too, affords a field for psychological study which is still insufficiently explored.

The pædiatrician can never be independent of the help of his colleagues. Neurology, cardiology, orthopædics, as well as general medicine and surgery, have each and all their contribution to make to pædiatric knowledge. With psychiatry the co-operation should be especially close, and it is the more to be deplored that the trend of development at the present time has been to separate to a great extent the study of the child's mind and conduct from contact with the other aspects of child study. It is unfortunate that so few child guidance clinics have been established in medical schools and in close association with a department of pædiatrics. There are functional disorders of childhood which are at once the effect and the cause of disorders of conduct. For example, any exciting or alarming experience, the visit to a theatre or to a dentist, in certain predisposed children may be counted upon to provoke an attack of ketonæmic vomiting, and it is a common experience that accompanying and following upon such an attack there is often an exacerbation of the particular fears, phobias, tics or abnormalities of behaviour to which the child is prone. To hold the tendency to ketonæmia in abeyance by dietetic and other means is often to alter at the same time the child's whole attitude to life, and to turn an anxious apprehensive outlook into one of confidence and security. We must play the psychiatrist not only in considering disturbances in the child's emotional life and difficulties of adjustment as shown by timidity, stammering, habit spasm, enuresis, disorders of conduct and a host of other symptoms, but something of a psychiatric approach will often be necessary if our treatment of such disorders as asthma, eczema, epilepsy and ketosis is to be successful. The psychiatrist must be at our elbow to teach us, not in a remote special institution concerned in dealing with only a group of children with extreme reactions to social difficulties, who have proved troublesome at home, in school or in the police-court.

The splitting up of pædiatrics into a variety of separate studies is proceeding apace in this country. Thus there is a tendency for the study of the infants' diet to be divorced from the study of the infant and the pure milk of the Gospel, in return for a subscription to keep the good work going, is dispensed by a number of devoted and widely advertised sisterhoods which exist only for that purpose. Again, I think it is one of the misfortunes of pædiatrics in this country, as it is one of the misfortunes of the children of this country, that the exanthematous fevers are nursed not in the wards of children's hospitals and children's departments of general hospitals, but in a special fever service. If the study of functional nervous disorders of childhood were also to be separated from the study of pædiatrics as a whole, what then would be left? Not much.

A Case of Cushing's Syndrome

By D. M. Carnegie

On 21st March, 1941, a man of large build, aged about forty, walked into medical out-patients' at Guy's and immediately a tentative diagnosis of polycythæmia was made on account of his unusually red face. He complained of shortness of breath, headaches and tiredness for the last three years, these being particularly severe during the last three months.

During childhood he had had scarlet fever. Throughout his life he has had a cough with white sputum, which becomes yellow when he has a cold. At the age of five he began to attend the Brompton Hospital and, after three to four years there, was then sent to a convalescent home for two years. During the last war, while in the Army, he had malaria; but he was discharged A 1 in 1919, and then went into the Southern Railway as a platelayer, which occupation he kept until the beginning of 1938. Since then he had been confined to light work only, owing to shortness of breath and attacks of giddiness.

In 1923, at the age of twenty-three, he weighed 11½ stone and by 1925 his weight had increased to 17 stone. At this weight he remained for one year, and then during the course of the next ten years lost almost all the excess fat from his face, neck, chest and limbs, while his abdomen remained the same size. His weight has now dropped to 11 stone 13 lbs. In answer to a leading question he stated that he lost his libido about 1923. He thinks that his round shoulders also developed about this time (1923–1925) since " I was straight enough when I was in the Army." He also complained at the same time of pain in his back—the lower dorsal region—and it was " a vacant feeling as though one part of my body was separated from the other." It is well to note here that this type of pain is often one of the most aggravating symptoms for the patient, and it is usually due to an osteoporosis of the vertebræ with secondary involvement of the spinal nerves. The redness of the face may have developed at the same time, but it was not mentioned to him by his friends until ten years ago (1931). This high colour did not seem to run in his family except that his grandfather had a very red face and weighed 16 stone. He has always bruised very easily during the last twenty years, and says that this especially occurs after being examined by a doctor! By pinching himself he can produce quite a large bruise in a few moments. His bowels are normal. He suffers from nocturia. His appetite is now good, but from 1923–1925 it was so voracious that he felt ahamed of it; at this time he used to drink about six pints of beer per day.

In November, 1940, he gave up work altogether, because he was fighting for his breath, had some swelling of the ankles and cyanosis; and so at the end of that month he went into the Mayday Hospital, Croydon, for four weeks, where he was diagnosed as cardiac failure and chronic bronchitis. There he was propped up in bed although he himself preferred to lie down. At the end of February his cough got worse, his pulse became rapid, and his doctor sent him to bed for three weeks. He got up for one week and then attended out-patients'.

On examination he was found to be plethoric; the mucous membranes of the conjunctivæ and throat were deep red, and the conjunctivæ over the sclera appeared slightly injected. His abdomen was distended in the flanks as well as anteroposteriorly, and showed many purplish striæ atrophicæ more than ¾ inch wide radiating up from the pubis over the lower abdomen; also a few small striæ were seen over the upper part of the thighs and upper arms. It was the blood-red appearance of these striæ that first led him to see his doctor. The pubic hair tended to be of female distribution, but he thought that this had always been so; and his genitalia were normal. There was some granular breast tissue, particularly on the right side, where there was a small outlying nodule, which might be breast tissue, in the second intercostal space. There were several bruises on the right forearm. Over both legs there was a slight degree of pitting, and over the antero-lateral aspects there was a marked brown pigmentation. There was advanced kyphosis of the dorsal spine, so that the antero-posterior diameter of the chest was as great as the lateral. The thoracic cage was very rigid and respirations were largely diaphragmatic. There was a poor air entry, but it was equal on both sides, and occasional rhonchi were heard in all areas. His blood pressure was 170;115, and the pulse rate was 80 per minute. The liver was palpable about 1½ inches below the costal margin. There were no other physical abnormalities and the urine was normal.

Various investigations were carried out and the results were as follows :—

Blood. Hb. = 105 per cent.
R.B.C. = 6.1 million per cu.mm.
W.B.C. = 10,600 per cu.mm.
E.C.G. Normal.
B.M.R. −9.5 per cent.

Glucose Tolerance Test.
Fasting = 0.07 m.g. per 100 c.c.
1 hr. = 0.11 m.g. per 100 c.c.
2 hrs. = 0.064 m.g. per 100 c.c.

The fasting blood sugar was low and the sugar tolerance was high.

X-rays. (*a*) Sella turcica.
The posterior clinoids did not show.
(*b*) Spine.
The X-rays were too bad for an opinion to be given.

There are three main reasons why this case has been reported :—

1. Because of its supposed rarity in males.
2. Because most of the text-books lead the reader astray as regards prognosis.
3. Because little is said as regards the treatment.

In Harvey Cushing's original paper on Pituitary Basophilism (1932) he reports twelve cases in all, of which seven were female and five male. If women are more commonly victimised than men the reason for this is not fully apparent. However, it is suggested that the reason lies in the fact that the combination of amenorrhœa, adiposity and heterosexual hirsuties is more noticed and recorded by the physicians than the corresponding condition in men. More recent writers, however, have suggested that it is, in fact, more common in the female than the male. The reason given is that the female pituitary has to undergo a much greater disturbance — during menstruation, pregnancy, menopause—and therefore is more liable to be affected than the corresponding gland in man.

As regards prognosis, a physician who saw the case, reported above, gave as one of his reasons for not believing it to be a Cushing's syndrome, the fact that the patient is still living eighteen years after the onset of the disease. The impression gained both from Cushing's original paper and particularly from the text-books is that the prognosis is about five years. Cushing's cases were selected from the literature between 1907 and 1931, and he found that the average duration of the disease was five years—the extremes being three and seven years. But it must be realised that Cushing most probably selected the cases that had come to autopsy, so that he might be able to prove that the essential cause of this syndrome was a basophil adenoma of the pituitary, and not primarily a hyperplasia of the adrenal cortex with secondary pituitary involvement. Also the milder cases of the syndrome, which have recovered, may not even have been noticed or, if they had, been reported on. It is now believed that this condition can occur in any degree from the mildest to the most severe, and the symptoms may retrogress to a certain point, where they may remain stationary for many years. The usual cause of death is from some intercurrent pulmonary infection.

There are three methods of treatment, all of which aim at depressing the functional activity of the pituitary :—

1. Operation. Implantation of radon seeds, and even removal of the whole gland have been undertaken, but in the few cases that have been treated by this method, signs of serious pituitary deficiency nearly always appear. It is quite impossible to remove the tumour alone, because even when it is presenting its most severe manifestations it is not large enough to cause pressure symptoms on the remainder of the gland. At this point it is well to note that " it is the degree of secretary activity of an adenoma, which may be out of all proportion to its dimensions, that evokes the recognisable symptom - complex in all hypersecretary states " (Cushing).
2. Deep X-ray therapy. This has been tried in a number of cases with somewhat conflicting reports. Some workers report no change in their patient's condition ; others a complete cure ; but the majority have reported only a temporary improvement in the symptoms and signs.
3. Oestrogen administration. When this form of treatment is carried out it should not be used instead of deep X-rays, but as an

adjuvant. Oestradiol benzoate injections are usually administered, and they must be given in an intensive course of large doses (5–15 mg. thrice weekly for six months). Otherwise they are not effective. Also towards the end of the course the dose should be gradually dimished, because symptoms of hyperactivity of the pituary gland are liable to occur if the drug is suddenly stopped.

At the present time there is no permanent cure for the disease, but deep X-ray therapy in conjunction with œstrogen administration improve certain cases to a very great degree although this improvement is often only temporary.

In conclusion, with regard to the diagnosis, attention should be drawn to a few points, which do not seem quite clear in the text-books. The syndrome may occur at any age, but is usually more noticeable in young adults. It is characterised by the sudden putting on of weight and losing it again almost as rapidly—for example, gaining two stone in about two months and perhaps losing it again in four months—although this is not always the case. It is well to note that the adiposity is very often a painful one. The polycythæmia, which often occurs, usually has a hæmoglobin percentage lower than it would appear to be; for example, in this case the hæmoglobin was expected to be between 130 and 140 per cent., but on investigation was found to be only 105 per cent. And finally the systolic blood pressure is nearly always over 180 mm. Hg. The remainder of the symptoms and signs of this polyglandular disease seems to be quite adequately dealt with in the various text-books of medicine.

We are indebted to Dr. A. H. Douthwaite for permission to publish the notes of this case.

Bull, Johns Hopkins Hospital, 50, 137.

Sector News

Guy's Letter

And there was yet one more that dwelt in the house of Nuff, and he was called Ray, the son of Mond, of the house of Hinde.

Now he was a little man: and yet once in every period of two weeks, all the dwellers in the house of Nuff were sore afraid, for the pen was as a two edged sword.

And this Ray was ambitious, and he did follow in the ways of all the great men of the house of Nuff.

For he did learn the art of cutting from Samuel, the son of Wass: and he did study the works of Gib and Mac.

But he did differ from these two great men, for he had a mighty voice, even as the voice of Tub.

Even did he presume to imitate the works of Abe the Anæsthite, but in this, he was as a child, for the art of the needle may only be learned by much study and suffering.

But after two score weeks, the Gods, who ruled over Bish, the ruler of the Temple, did tire of Ray, the son of Mond, and he departed from the midst of the house of Nuff.

And he took unto himself a strange apparel, and did prepare to travel to a distant land.

Now this land was called India, a land of strange disease, such as was never seen in the temple where dwelt the sons of Guy.

And there was great sorrow in the house of Nuff, and also a great peace.

EPILOGUE.

We have had to bid a sad farewell to five Residents. We have lost our President, Raymond Hinde, who, with " Silas " Clarke, is joining the Indian Medical Service. Roger Kynaston, " the Englishman," prefers the Army.

We wish them every success and envy those who will now be having their companionship.

Stead and Hallam have left for Orpington and Farnborough.

We are very pleased to welcome Dr. Keedy, who comes to us from America.

Congratulations to Morton Palmer, Ogilvie and Stone on their appointment as Out-Patient Officers; and to Ripman, who has been elected a Student House Officer.

C. F. H.

Pembury Letter

IT is with much regret that we have to take leave of three residents. At last we must lose Comrade Can-you-lend-me-your-bicycle-to-go-to-Tonbridge Dennis Horan—the man who has explored to its full range the declamatory possibilities of the English language at the expense of Pembury, its staff and conventions—the man who could get the last word with the Medical Superintendent, be it ever so irrelevant. Pembury can never be quite the same place when Dennis has gone, but, no doubt, his ghost will return from forking pork in Poona to prick the consciences of those who have fallen again into the ways of sloth and red tape, triple width, from which they have so hardly been raised.

Gentleman Aren't-men-beasts David Roberts also leaves us. The absence of his cynical humour will be a great loss to the mess and he will be greatly missed, as will Paterfamilias One-long-round Pat Norris, our comparatively resident non-resident resident, whom we are also losing. We are pleased to have Fowler, McFall and Albers in their places.

A memorial cricket match was held in honour of those departing, in which Sisters and House Officers were beaten by a team of Nurses and Students. The game was more remarkable for its by-play than its play. We are pleased, however, to say that the rules were strictly adhered to ; that a catch by an enthusiastic umpire was not allowed ; and that a batsman, tackled in the middle of the pitch, still reached his crease before the ball.

Another sporting event of the week has been the final of the tennis competition, which has been running throughout the summer and was won by Merrick and Nurse Bridgewater. This was followed by a most successful dance in the Nurses' Home, at which we were pleased to see many people who were formerly down here but are now in other parts of the Sector.

G. L. L. R.

Farnborough Letter

THERE has been a certain amount of upheaval this last week owing to the Housemen changing over and the departure of two members of the staff on holidays. Of the old Housemen, Mr. Gill has left us for Orpington, and Mr. Rawlings, though he remains here, has been promoted, so we welcome two newcomers in the persons of Mr. Crabtree and Mr. Hallam. The apparently unsurmountable difficulty of filling two medical and two surgical jobs with four medical aspirants has been tactfully and successfully negotiated, and all now seems set fair for the next few months.

We have been especially fotunate in securing for the holiday period the services of Dr. R. E. Smith, of Rugby, who is now helping with the medical teaching. His coming has avoided that rather enervating hiatus in the rounds which in peacetime used often to characterise the summer months.

A cricket match was arranged to take place on Wednesday last between the Doctors and the Students, and we had promised to publish an account of this in our letter. We have, however, been spared the necessity of embroiling ourselves with straight bats, square legs and gullies, and are able to furnish an accurate and complete record of the proceedings in three words—" rain stopped play."

The difficulty of drawing sound conclusions from small samples is well known to statisticians, but, with this proviso, one may say that one of the characteristics of a present-day Guy's pathologist appears to be a great propensity to invasiveness where new buildings are concerned. Those stationed here are behaving true to type and are now in process of moving into their new block, which is a somewhat less pretentious edition of the *new* Path. Block at Guy's, lacking, however, the excellent cuisine which distinguishes its prototype. We have not yet had an opportunity of exploring the new premises at all fully, so for the present let us leave the subject with a plagiarism of the cryptic and tantalising phrase which our contemporary, D. M. J., applied so effectively last week to the American nurses—" a further report will be given later."

V. C.

Southern Letter

FOR nearly two long years the Dartford Bumpkins have been allowed to exist unhonoured and unsung, grateful for a rare crumb thrown from the master's table, occasionally remembered as inhabitants of a land on the other side of Lethe, where unpublishable results are sent to be forgotten.

And now, behold, a place in the sun—a space in the *Gazette*.

Many will ask, Why this sudden appearance after so long an eclipse? We will tell you. The Assistant Editor of the *Gazette* is now officially one of us. Now that he is to be found within our walls he feels that it is necessary for us to appear in print—so here we are. Such is fame.

Our first duty and also pleasure is to welcome two newcomers—Mr. Stanley and Mr. Gillman—who replace Mr. Rewell and Mr. Pearson ; we hope that they will find both their work and their colleagues to their taste.

A characteristic of the Southern, not found so frequently at similar institutions, is the delightful air of domestic bliss coupled with an intense desire to assist in the war effort. Mr. Schulenberg, our erstwhile surgical registrar, now safely returned to South Africa, heads the list with a daughter of some six months or so. David Willis, with another daughter, now takes his responsibilities as he should, although we understand that he cannot quite bring himself to sign the pledge. Hugh Guerrier has recently added a son to the list, which, three days ago, was completed by our radiographer, Mr. Beta, adding a further male offspring. The list should have been larger still, but Dennis Fuller departed for South Africa in a cloud of smoke during the last London M.B. examinations.

Professor Ryle has recently been to visit us and conduct a round in the medical wards. What a happy reminder of the days that were—complete with some fourteen residents in attendance, almost the whole Southern staff. We thank you, sir, for your presence and stimulating discussion and most sincerely hope that this will prove to be the first of a regular series of visits occurring, dare we hope, as often as once a fortnight?

Yet another of our number is shortly to be entangled in the web of matrimony. We wish him and his future wife all possible happiness and success. Far be it from us to mention his name and thus render him an easy prey to his more humorous associates, only let us say that his removal of half of Reginald Rewell's beard and whiskers at 2 a.m. one morning would, for sheer slickness, have put Sweeney Todd out of business.

It is said that we are fighting for democracy. The other morning, attended by a vast concourse of medical men, Rear-Admiral Gordon-Taylor, who visits us from time to time, examined a patient who had been prepared for the only operation of the day and, for various reasons, decided to abandon it. After some discourse he turned to the theatre staff nurse. "I wonder if Nurse has a cup of coffee for us," he said, with his charming smile. "I dinna ken ye deseerrve it, mon," was the reply in broad Scots. How good and right a thing is this freedom of speech.

H. P. G.

An Emergency Doctor in the R.A.M.C.

THE modern Army is very healthy. There was a long article saying so in one of the papers the other day, and it gave the Medical Services a big hand. So it must be true. To me, in my capacity as a Regimental Medical Officer, it read almost as a personal tribute, for in my battalion no one ever is ill. I must admit that men occasionally report sick, but there is extraordinarily little wrong with them. A soldier may have sore feet, or an aching tooth, or perhaps a gnat has bitten somebody. Not infrequently it appears eventually that nothing more than the prospect of a particularly uninviting route march has inspired the symptoms of some unusually nebulous malady. But as for any disease of respectable significance, such a thing is never even suggested.

Not that I am idle. Far from it. There are wells to be tested, kitchen sumps to be drained, and holes to be dug and filled in again. Nevertheless, important as these activities are, one is aware of a certain contrast with the life at Guy's, where patients are ill, and a man who says he feels a little breathless, nothing to worry about, is apt to be dying of pneumonia. Medically, it must be admitted, there is a certain lack of scope. It is easy to feel that a chiropodist might do as much or a sewage inspector. A doctor feels a trifle thwarted.

But last week there emerged a ray of light. Private Hacker developed a cough. It was a nasty cough. Now the thing about coughs is that, like headaches or backaches, a reasonably substantial cough may be the leading symptom of about half the diseases known to medicine, and may suggest considerably more even than that to a medical officer who for a year has been called upon to deal with nothing more urgent than a sweat rash in the crutch.

So it was with me. This may be bronchiectasis, I thought at once, or silicosis, or possibly whooping cough, pneumonia, carcinoma of the bronchus, or tuberculosis. For the matter of that one had to exclude influenza, measles, cerebro-spinal meningitis, lung abscess, anterior poliomyelitis, hay-fever, asthma, and peanuts in the larynx.

I examined Private Hacker with the pent-up enthusiasm of months.

At the end of an hour I was reluctantly compelled to admit that there was evidence of nothing more alarming than a mild bronchitis. However, I determined that at least he should be treated with all the best of modern skill. I ransacked our field equipment. And now it was that I came up against that wise provision of the Army which effectively prevents the mischance of any of its members having to do too much thinking for himself. In this case the possibility of therapeutic error was reduced to a minimum. All the medicines supplied were contained in about half-a-dozen small cartons packed in a tin box about the size of a debutante's flap-jack. Each carton bore a label of one word. I noticed at once DIARRHOEA, and its classical antithesis, CONSTIPATION. Information as to the nature of the ingredients designed to effect a cure was tactfully withheld. However, my own duty was clear. All I had to do was to extract a couple of pills from the appropriate carton. There was no difficulty about this, for one of them was marked COUGH, 'poison.' I am still a little puzzled about that small additional footnote, suggesting as it does, a somewhat extreme measure whatever the pathology. Yet such is the power of discipline in the Army that any qualms that I might have felt on that score were immediately dispersed. And justifiably, for Private Hacker did not in fact succumb, but was shortly able to resume his duties.

All the same I still feel a little thwarted.

Correspondence

Status Epilepticus—Septic Pneumonia—Hyperpyrexia

To the Editor of the GAZETTE.

SIR,—A well-developed idiot girl, eight years of age, who was first able to stand unsupported two years ago, had for some months, in the early morning, an epileptic fit almost daily. Prior to this fits were of paroxysmal occurrence. During the past five years she has consumed pounds of chloral hydrate and sodium bromide to discourage fits and encourage sleep. On Sunday, July 6th, she started fits in the early morning, and they continued with short intervals until 11 a.m. She seemed very ill, but was not coughing and the pulse was good. I gave her inj. morph. hypod. 81⅓ at 11 a.m. She had no more fits and for hours was breathing rather quickly, but comfortably. I saw her at 11 a.m. on July 7th, and was surprised to find the temperature in the axilla 106 deg.; another reading in the rectum showed 107–8 deg. Some rusty sputum dribbled from her mouth and her breath was, I think, the foulest I have ever experienced. There were physical signs of lobar pneumonia at the right base. She died at 3 p.m. that day, and her attendant, who is a most intelligent woman and an able untrained nurse says she is sure she was "much hotter" just before death than when I saw her at 11 a.m. Query: What was her temperature just before and after death. Possibly one of those 110s we read of. The highest temperature I have previously taken (in forty years' practice) was one of 106 deg. in the influenza epidemic of 1917–18.

Yours, etc.,
A. H. B. KIRKMAN.

An Appreciation

To the Editor of the GAZETTE.

SIR,—I have just read R. T. H.'s latest contribution to your columns and could not help delivering myself of the following appreciation:

Sent to amuse us.
Oh, Son of the Muses,
We answer your call—

With little restriction
And full of conviction
We say to you all:

There's no one who betters
In matters of letters
Our man of the moment and wonderful find;

Oh, felix, beatus!
Oh, Poet Laureatus!
Oh . . . Raymond T. H . . . .!

"ARDENT ADMIRER."

Guy's Hospital,
London, S.E.1,

Reviews

Essentials of Physiology. By F. A. BAINBRIDGE and J. A. MENZIES. Ninth Edition. Edited by H. Hartridge. Published by Messrs. Longmans. Pp. 651. *Price* 16s.

SYNOPSES have always been popular among students, who imagine them to be short cuts to knowledge, since a synopsis by using small print and a tabular method of presentation, compresses into a few hundred pages the subject-matter of a lengthy text-book. After a while, the student realises that this short cut is much harder to traverse than the ordinary path, because the synopsis, as a result of its construction, is compelled to forsake clarity for brevity. For this reason, too, it fails to give a consecutive account of its subject, nor does it distinguish sufficiently between the important and the trivial.

It might be thought that an "Essentials" would be exempt from these criticisms; indeed, a book which truly presented the essentials of a subject would be of great value to the student. But the book under review, although called Essentials of Physiology, is in reality a synopsis, and suffers from all the faults of one. The author has felt that no information should be omitted that might be asked for by an examiner, and accordingly a place has been found for a large number of statements, irrespective of their importance, or at times of their truth. As an example, on page 267 occurs the remark, "any gas mixture containing more than 10 per cent. carbon dioxide acts as an anæsthetic." This needs no further comment.

Dogmatic assertions are unavoidable in a book of this type, and when they are only half-truths may be dangerous knowledge for the student. In the twenty-three lines in which the author deals with the causes, signs, symptoms and treatment of secondary shock, the condition is stated—three times—to be due to the absorption of histamine, no mention being made of any alternative hypothesis. There are occasional gross mistakes, clearly not misprints. On page 549 is given the " formula " of vitamin D, which, apart from bearing no resemblance whatsoever to the real formula, is a chemical impossibility, as it shows a carbon atom with a valency of five. The author has tried to include in his book all the recent advances since the previous edition, and these are given as much space as many more important subjects. Thus, as many lines are devoted to guanidine tetany as to the effect of exercise on the heart rate. Each is dealt with in fifteen lines.

The reviewer, having the interests of students at heart, cannot recommend this book to them.

M. L.

Essentials of Modern Chemotherapy. Edited by Sir HUMPHREY ROLLESTON and ALAN A. MONCRIEFF. 1941. Eyre and Spottiswoode. Pp. 104. 6*s*.

DESPITE its comprehensive title this book deals only with a small, although important field of chemotherapy. It is a collection of articles on sulphonamide therapy which appeared in the *Practitioner* over a year ago. As must be expected in a book of this type, there is much repetition and overlapping of subjects. For example, four of the eight authors deal with the complications following sulphonamide therapy, each saying the same things. The articles, on the whole, are well written, but the information they convey is now to be found in most standard textbooks of therapeautics. There is, however, an appendix describing, very briefly, the uses of sulphonamides in war-time. The best part of the book is the index, which occupies sixteen pages out of a total of 104.

M. L.

A Complete Outline of Fractures. By F. GRANT BONNIN, M.B., B.S., F.R.C.S., M.R.C.O.G., First Assistant to Injury Clinic, West London Hospital, etc. Published by Messrs. Heineman, London, 1941. Pp. 493, with 19 plates and 575 illustrations. *Price* 25*s*.

NOT so many years ago there were very few special books on fractures written in this country, and the student had to content himself with such knowledge as could be obtained from the standard textbooks of surgery. Each year more and more books on this important section of surgical practice are added to the library, and this last one is a very welcome addition. The increase in the writings on fractures can be traced to the widespread realisation, amongst patients, practitioners and surgeons, of the difference between good treatment and bad, and to the organisation throughout the country of fracture clinics, encouraged by the Ministry of Health. It is therefore more than ever necessary for all to seek carefully for the book that will give the maximum amount of knowledge in an easily readable form.

Mr. Bonnin has attempted this task, aiming particularly at supplying that need for the senior student and practitioner. He can well claim that the book is complete, for he deals not only with fractures of the long bones, but also with fractures of the vertebrae, of the skull and the jaws and face, and has added a useful chapter on dislocations. One hundred and twenty pages are devoted to the study of fractures in general, including chapters on the mechanism, repair, signs and symptoms, complications, apparatus required, plaster technique and anæsthesia. The illustrations are plentiful, and one can commend the simple support shown for upper limb fractures requiring continuous weight extension.

This is followed by a section on fractures of the skull which is very well presented. Fractures of the jaw and facial bones are equally well described, a feature that is uncommon in books of this type. The treatment of fractures of the vertebrae follow the usual well-established methods, except that the author favours applying the plaster jacket with the patient in the supine position, lifted by a broad sling under the region affected.

The fractures of the long bones are likewise dealt with very thoroughly, and a very complete classification of the possible injuries presented with each bone is discussed. In this respect the book tends to be a little cumbersome for the undergraduate, but is of extreme value to the practising surgeon, for every detail of treatment is clearly stated for each type of fracture. In ankle fracture the differences between rotation fractures, abduction fractures and adduction fractures are clearly stated; the simple method for introducing a Smith-Petersen pin is well worth study. Fractures of the pelvis are well described, including the complications involving the urinary tract.

Only two minor criticisms call for mention. The author makes a special point of leaving the thumb metacarpal entirely free in treating fractures of the scaphoid, but points out that the plaster requires careful watching and frequent renewal. Surely a more complete fixation would carry no disadvantages, and would be more secure. Insufficient emphasis is placed on the dangers of torsional strain on fractures below the knee during the period of healing.

The book can be strongly recommended, and the addition of an appendix containing information on disability tables, exercises and the organisation of a fracture department makes it particularly valuable for all those likely to meet with fractures in greater or lesser numbers.

N. L. E.

Anatomy and Physiology for Nurses. By EVELYN PEARCE. Published by Faber & Faber. *Price* 5*s.*

THIS textbook is now well known in the library of most training schools for nurses, and this fifth edition will no doubt add to its popularity. It has been enriched by many new diagrams which are consistently good, simple and clear. Miss Pearce is an experienced teacher of nurses, and has produced a most useful book which cannot fail to clarify many points, and experiments dealt with in the more advanced lectures and demonstrations attended by nurses in the laboratories and dissecting rooms of the medical schools.

H. M. G.

General Nursing Questions and Answers. By DORIS TAYLOR. Published by Faber & Faber. *Price* 4*s.* 6*d.*

THE fact that this book has passed through five editions shows that many nurses like and use it. The suggestions as to how the writing of examination papers should be tackled are excellent and show that the writer understands the nurses difficulties. It is a pity that some of the facts in the answers are neither strictly accurate nor up to date; for example, the statement that in severe cases of concussion the patient *may* be unconscious, and the omission of the eumydrin treatment in cases of congenital pyloric stenosis. Other examples could be cited.

H. M. G.

Sport

Cricket Averages

BATTING.

(Qualification, 5 innings.)

	No. of innings.	Times not out.	Highest score.	Total No. runs.	Average
J. W. A. Crabtree	6	1	76	240	48.0
C. S. Goodner	13	3	80	421	42.1
G. Murphy	9	2	101*	275	39.2
A. V. Hurst	11	1	69	298	29.8
G. Hildick-Smith	5	0	56	137	27.4
H. A. Thomas	8	0	47	211	26.3
S. N. Cole	9	0	27	109	12.1
R. L. Skea	8	1	29	61	8.7
T. Wooldridge	7	2	18	37	7.4
J. H. Knight	6	0	12	24	4.0
P. Brown	5	0	7	18	3.6

* Denotes not out.

BOWLING.

(Qualification, 5 wickets.)

	Overs.	Mdns.	Runs.	Wkts.	Avge.
C. B. Clarke	28.7	4	103	16	6.4
T. Wooldridge	23.4	2	113	10	11.2
J. H. Knight	86	13	352	28	12.5
G. Hildick-Smith	31	3	118	9	13.1
C. S. Gardner	27	2	120	7	17.1
A. V. Hurst	20	4	87	5	17.4
R. L. Skea	82	10	371	18	20.6

The Sailing Club

WHEN the War began members of the Club were cut off from their clubhouse and boats, and it seemed that all sailing must stop for the duration—a gloomy prospect.

Actually we have been more fortunate. The London Corinthian Sailing Club, at Hammersmith, were kind enough to welcome the Club and give us their facilities; and, by bringing up to London nine of the Hospital dinghies it has been possible for members to sail when they like and in their own boats.

Some have complained that "it's not like Burnham," and indeed that may be true. On the tideway the wind doesn't come howling at you from across the flats, but rather jumps at you round the corner of a factory. And, if you can't go exploring in Havengore, shooting bridges against the tide provides just as much excitement.

The U.H.S.C. is one of the few clubs in the country which has carried on at all, and in some respects we have gained by our change. Sailing was possible all last winter, and it was an inspiring sight to see members setting out in the bleak days of last January. And who, in peace time, was able to get away from Guy's at seven o'clock on a summer evening, have two and a half hours on the river and return before dark?

Guy's men have run the Club since the beginning in 1926; and Guy's men have made the Club tradition—to sail whatever the weather. New members from Guy's are welcome—to carry on that tradition.

J. S. S.

Guy's Hospital Squash Club

President:

J. B. Blaikley, Esq., F.R.C.S., M.C.O.G.

Of all the sporting activities connected with Guy's since the war started none could have been more successful than the Squash Club, who concluded their series of matches at the beginning of May. In all eleven matches were played, nine at home and two away, all of which were won, but the hospital side had to work hard to beat Bart's and Middlesex Hospitals, both of whom were defeated by 3–2. The selected teams were, as far as possible, the best available, and the players were drawn from the sector hospitals, but it was not possible to include the more junior men as their form was not known to the Committee. No doubt some promising material will be discovered before the next season opens—that is the hope of the Committee.

The Club are much indebted to Mr. Blaikley, who has shown tremendous enthusiasm by attending the matches, for his valuable support at all times, for his kindness in presenting the club with a Dunlop max-ply squash racquet for the use of any member of the team, and, above all, he has always been ready to step into court and give the players some practice. He is no mean exponent of the game himself and played in one of the matches.

Undoubtedly the hospital star was G. Hildick-Smith, the Cambridge Blue, who went through the series without losing a game, and it is with regret that we were unable to arrange a game with St. Mary's and to have seen him in action against Peter McCrae. Every effort was made to play St. Mary's, who scratched the first game and were unable to provide another date.

The Captaincy was in the capable hands of W. J. Lewis, and he deserves heartiest congratulations on the results achieved. Dr. A. Shein, in the capacity of Hon. Secretary, arranged an excellent fixture list under very difficult conditions owing to the limited number of clubs available, and, in addition, was a regular member of the team, only losing one of his matches. Also to lose only one game was F. R. C. Manning, and the other regular member was J. Mordaunt. Blues have been deservedly awarded to the players mentioned.

A word of regret must be said of H. G. Chase, without question the hospital's number two, and H. L. Joyce, both of whom would have been in the selected teams, but were unable to take part owing to their duties at the sector hospitals far away in the country.

At the beginning of the season the Housemen had an interesting match with the Students, and the friendly rivalry is a sure sign that there will be a demand for a return at some future date.

The Squash Courts were made available to the Nurses, Massage Students and the Female Administrative Staff, several of whom took advantage of the facilities offered them, but there is no evidence at the moment that a challenge to the men's supremacy is imminent.

Results.

v. Dulwich College. Home.	Won 4–1
v. Dulwich College. Home.	Won 3–2
v. Middlesex Hospital. Home.	Won 3–2
v. Bart's Hospital. Home	Won 3–2
v. Westminster Hospital. Home.	Won 5–0
v. Westminster Hospital. Away.	Won 4–1
v. Sundridge Park. Away.	Won 5–0
v. Sundridge Park. Home.	Won 4–1
v. London Hospital. Home.	Won 5–0
v. Auxiliary Fire Services. Home.	Won 5–0
v. Metropolitan Police, "C" Division. Home.	Won 5–0

Hospital Information, etc.

Notice

GUY'S HOSPITAL MEDICAL SCHOOL.
SCHOLARSHIPS IN ARTS AND SCIENCE.

The following awards have been made for 1941:—

Entrance Scholarship in Arts of the value of £100.

Ernest Ludwig Willy Leiser, Brighton, Hove and Sussex Grammar School, Hove.

Entrance Scholarship in Science of the value of £100.

Divided between James Cooper Crook, Worksop College, Notts, and Denis Dewhurst Hilton, Bolton School, Bolton, Lancs.

GUY'S HOSPITAL DENTAL SCHOOL.
SCHOLARSHIPS IN ARTS AND SCIENCE.

The following awards have been made for 1941:—

War Memorial Scholarship in Arts of the value of £40 per annum for four years.

Robert Lindsay Harbour Barnard, Kingswood School, Bath.

Entrance Scholarship in Science of the value of £40 per annum for four years).

Divided between Raymond Arthur Morsman, Chelsea Polytechnic, London, and Alec Frank James Smith, Truro School, Cornwall.

Pass List

CONJOINT BOARD.
FINAL EXAMINATION.
July, 1941.

Pathology.

S. H. Bockner
P. L. Cardew
*S. L. Cole
P. B. Counsell
J. W. A. Crabtree
F. K. Crittenden
M. C. Cross
W. G. Cross
D. G. Dixon
D. P. Finnegan
R. Franey
*J. A. Gillett
J. G. Goodhart
B. P. Griffin
A. W. Hind
E. O. Hohn
D. A. King
B. Kustow
N. P. W. Littler
G. H. F. Lloyd
V. H. Martindale
P. B. Maxted
L. R. McLaren
V. J. McLean
L. F. Miller
A. T. Moorhouse
J. B. Musgrove
*J. P. H. Ogilvie
A. C. Parkinson
D. D. L. Rees
*G. P. A. Sechiari
F. H. Staines
P. E. Steele-Perkins
J. W. Stephens
B. J. Stevens
W. J. Stevens
S. D. Stock
G. E. Thomas
D. G. Vulliamy
J. Wilks

Midwifery

A. E. M. Ash-Wiggins
*J. P. Bull
*D. W. Burgess
A. V. Cockburn
R. A. Craig
G. W. Downs
R. A. H. Dubery
P. R. C. Evans
G. C. Foster-Smith
P. W. Hopper
J. T. M. C. Jenkins
T. Koonvisal
H. C. Mukerji
J. D. Paulett
W. A. Porter
W. Recht
R. K. Roberts
P. E. Steele-Perkins
W. J. Stevens
C. H. Watts
T. R. Wooldridge

Surgery

A. E. M. Ash-Wiggins
P. Baxter
*A. G. Beaton
J. F. R. Bentley
H. A. Buck
*J. P. Bull
*D. W. Burgess
*J. H. Capon
D. W. F. Charlton
N. F. Clarke
*S. N. Cole
R. A. Craig
F. M. P. Eckstein
*J. L. G. Hartley
A. W. Hind
*M. P. Hutchinson
J. A. Irwin
J. T. M. C. Jenkins
E. O. W. Jones
R. Leigh
G. MacVicar
D. J. W. Rees
H. A. Ripman
*E. Robinson
*G. P. A. Sechiari
F. G. Stoddart
*A. W. P. Stone
D. I. Thomas
D. G. Vulliamy
D. H. Wright

Medicine

*J. P. Bull
*S. N. Cole
*M. L. H. Evans
*N. Gillman
*J. L. G. Hartley
*F. Kohn
*J. P. H. Ogilvie
*A. L. H. Smith
G. C. Foster-Smith
*A. E. Thomas
F. A. Werner

* Have now completed the Examination.

UNIVERSITY OF LONDON.
M.S. EXAMINATION.
July, 1941.

H. R. S. Harley.

CONJOINT BOARD.
PRE-MEDICAL EXAMINATION.
June, 1941.

Chemistry

G. R. M. Mote
D. J. Reid
E. McKim Sycamore
A. E. Trist

Physics

D. M. H. Bickmore
J. R. Burt
G. R. M. Mote
E. McKim Sycamore

Elementary Biology

D. A. Barr
D. M. H. Bickmore
J. R. Burt
G. R. M. Mote
A. E. Trist
E J. Williams

UNIVERSITY OF CAMBRIDGE
MEDICAL AND SURGICAL DEGREES

Pharmacology

Easter Term, 1941.

P. L. Blaxter
I. M. MacArthur

Changes of Address

G. E. Aling, M.R.C.S., L.R.C.P., Port Blair, Andaman Islands, India.

O. B. Brears, Lieut. I.M.S., c/o Messrs. Grindlay & Co., Bombay.

C. E. Gallagher, Major R.A.M.C., The War Office, S.W.1.

T. W. S. Harvey, M.R.C.S., L.D.S., "Toorak," Limekiln Lane, Bridlington, E. Yorks.

Harris Jackson, Capt. S.A.M.C., c/o A.P.O., Durban.

Geoffrey Marshall, O.B.E., M.D., 149, Harley Street, W.1 (Tel.: Welbeck 4444).

Papers by Guy's Men

Brock, R. C. "Adenoma" of bronchus treated by Pneumonectomy. *Proc. Roy. Soc. Med.*, 1941, **34**, 556.

Pearson, R. S. Bruce. Steatorrhœa associated with Regional Colitis and Chronic Pancreatitis (specimens and slides only). *Ibid*, 558.

Herbert, W. E. An unusual case of fracture of a root of a Tooth. *Brit. Dent. J.*, 1941, **71**, 62.

Brock, R. C. Drainage of the Pleura. *Brit. Med. J.*, 1941, ii, 128.

Appointments

Major C. E. Gallagher, R.A.M.C., D.A.D.G., The War Office (A.M.D.3).

Miss Celia Reynolds, Radiographer (Overseas Nursing Service), Gibraltar.

Prisoner of War

Captain Alfred Ruff Darlow.

Births

DAWS.—On July 17th, 1941, at Aldershot, to Joan, wife of Captain Geoffrey F. Daws—a daughter.

Deaths

HARTE.—In April, 1941, through enemy action at sea, in evacuation from Greece, Captain Leslie Patrick Harte, L.D.S.Eng. (The Army Dental Corps), in his thirty-second year (*on active service*).

TUSTIAN.—On July 13th, 1941, Thomas Bernice Tustian, L.D.S., R.C.S., of Walter Road, Swansea.

EDS. N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV — *23rd August* 1941 — *Number* 1385

PASSIM

AUGUST must always be rather an empty month in the hospital year, although a cheerful one for all that. The dearth of clinical lectures, the post examination feeling of relaxation together with a reassuring notice upon the library door which creates the pleasant illusion that it would be wrong to work if one wished to all combine to produce an atmosphere which closely accords with the seasonal scarcity of students and doctors alike around the hospital. Although the ordinary work of the hospital, both in-patient and out-patient, continues to capacity, the continued lull in the enemy night offensive has made it possible for almost everyone in turn to escape from the Borough for a spell of fresher air. It is, in fact, almost a duty for all who will be on duty here during the winter to take a holiday now in order that they will be all the fitter for the hard work when and if it comes. The temporary closing of the library gives opportunity also to emphasise another important moral to the student : medical education has tended year by year to become more and more all engrossing in its demands upon his time. It has become very difficult to escape from the temptation to work at, read and think of nothing but medicine and allied subjects from the time of leaving school until qualification. After qualification there is little inclination left and certainly little time for the development of a fuller appreciation of even the other sciences, and the joys of music, art and literature are only too often neglected. The inevitable narrowing of the medical mind results in a failure of the true critical appreciation of medicine itself, and produces not only bad doctors, but also a grave lowering of the standard of a large proportion of those papers and articles which are published under the guise of medical literature. The temporary respite afforded the holidays of the library staff may be well utilised by delving into literature of another order.

◆

STRONG support for the United Hospitals Sailing Club has been for so many years one of the traditions of the hospital that there need be no excuse for stressing once again that the Club is continuing its activities and that admirable facilities for dinghy sailing exist within easy reach of the hospital at Hammersmith. A notice to this effect appeared in a recent issue of the *Gazette*, and in this issue a short article depicts some of the pleasures of what is possibly the most healthy and certainly the most pleasant of all forms of exercise.

◆

ONE of the few advantages that have accrued out of the present war has been the increase in mutual understanding and co-operation between the English-speaking peoples. Guy's has been fortunate in that a Colonial or Dominion element amongst its students has always been prominent. Two American doctors have now become our colleagues ; they have been welcomed elsewhere, but we must be grateful not only to them for coming to assist in the work of the hospital, but also for the opportunity for the interchange of views and ideas upon numerous medical problems which must result from their presence here. The rigid conservatism of the teaching hospitals in the selection for house and for junior staff appointments of candidates almost invariably from amongst their own students was perhaps inevitable, but it has resulted in the establishment of a group of circles of medical thought centred around each teaching hospital, and between which little or no intercourse or interchange of ideas occurred. The Sector system has broadened the outlook to some extent, but has unfortunately perpetuated these same circles or transformed them into triangles even more rigidly separated the one from the other. Just as the training of English medical students in the United States and the presence of American doctors in this country must add stimulation to medical thought and discussion, so also would, say, the presence of a Guy's man in a St. Bart's sector hospital and *vice versa*, without in any way upsetting the traditions of our own hospital, help to lessen the narrowness of the circle in which we tend to live.

◆

THE hospital has recently received a substantial gift of vegetables and fruit from the Dartford District Tenants' Allotment Association as a response to the " Grow Greens for Guy's " scheme organised by the Guild of ex-Patients. Anybody who, as the result of digging for victory, finds himself overstocked with an excess of perishable vegetables or fruit is urgently recommended to follow this example.

The Diagnosis of Gastric Carcinoma—Clinical Aspects

A Paper read to the Physical Society by A. G. A. Albers

THE purpose of this paper is to outline briefly the diagnosis of gastric carcinoma, giving special emphasis to the clinical aspect of early diagnosis, the urgent need of which cannot be too strongly stressed when it is realised that the majority of patients are beyond surgical aid before the diagnosis is eventually settled. With this in mind it is hoped that, by studying the natural history of the disease, by carefully assessing the early subjective symptoms, and by tackling the problem with a sound clinical approach, that the unhappy tendency to await the development of the typical syndrome of symptoms described in the text-books may be avoided.

The seriousness of the problem can be judged by a brief consideration of the number of deaths claimed by the disease annually. In the United States the American Society for the control of cancer publish the figure of 40,000, and in England Hurst has given the number as 16,000. Expressing the former figure in a comparative and more illustrative form Livingstone and Pack point out that since 1776 the United States engaged in six major wars extending over a total period of fifteen years. In these years 244,000 soldiers lost their lives. During the fifteen years of peace, 1923–1937 inclusive, 442,000 persons died from injuries received on the roads, while, on the basis of 40,000 deaths annually from cancer of the stomach, the disease claimed 600,000 lives over an equivalent period—nearly two and a half times as many persons died from cancer of the stomach as were killed in the total of major wars. An equally significant figure has been published recently by the Mayo clinic, which states that out of every twenty-five persons one will die from cancer of the stomach.

These figures clearly illustrate the menace of this form of cancer in everyday life, and the urgent need for the physician ever to be on the look-out for the possibility of cancer croppng up in his routine gastric cases. Medical treatment can achieve nothing in this disease; even surgery may achieve little, but without surgery there can be no salvation and without early diagnosis there can be little hope.

Before tackling the problem of early diagnosis there are a few points which can be learnt from the natural history of the disease. Its gross frequency has already been mentioned, but it should be qualified by the observations of Cramer, who pointed out the very much higher incidence found in the working class patient rather than in the upper well-to-do class seen in private practice. The sex incidence ratio of males to females is about 3.5 to 1.0. It is the commonest form of cancer seen in males. The age incidence is very relevant and shows the period between 40–70 and more especially between 55–65 as by far the most dangerous years. Maingot records only 10 per cent. of cases occurring before the age of 40. From an American series of 758 cases the authors found that one out of every nine cases was under the age of 40, and they drew attention to this early age incidence, stating that the neglect of such divergence from the more usual cancer age was one of the minor reasons of the present terrific mortality.

The question of heredity is becoming increasingly important as more data comes under consideration. Hurst was one of the first to lay emphasis upon the real importance of inheritance in diseases of the stomach. Balfour found a positive family history in 11 per cent. of his cases, and Maingot in 26 out of 100 consecutive cases. At a recent discussion in America on this subject Ochsner quoted the rather extreme views of J. Bauer, who had studied the family histories of between two and three hundred patients with carcinoma of the stomach. He found that a significant number had relations who have either benign peptic ulcers or gastric carcinoma, thus supporting the theory of a congenital predisposition to gastric lesions. He came to the conclusion that a patient with an ulcer, who has a history of ulcers in his family, has so great a possibility of developing cancer that a gastric resection should be done even though, as far as could be determined, the lesion was benign.

The next step is to consider the incidence of development of malignant changes in benign gastric ulcers, and following chronic gastritis. Opinion on the former differs somewhat. Walton believes that about 10 per cent. of gastric ulcers become malignant, whereas Finsterer puts the figure at at least 20 per cent. The presence of gastritis was considered by Konjetzny in Germany to be an important predisposing factor and he is supported in his view by Hurst. In 1934 he wrote as follows: "Carcinoma of the stomach never develops in healthy gastric mucus membrances, as I have over and over again stated as a result of my extensive investigations, an opinion which in recent times has been confirmed by many authorities, among whom I wish to refer especially to A. F. Hurst on account of his wide experience in gastric pathology." Hurst also quotes Katsch, who states that carcinoma of the stomach is secondary to chronic gastritis in 75 per cent. of cases and to gastric ulcer in 20 per cent. of cases: "That the latter figure is too low is suggested by the clinical evidence of Eastermen and Balfour that in about 40 per cent. of cases in which carcinoma was verified there was an antecedent clinical history and symptom complex typical of gastric ulcer."

We find, then, that Hurst, with the vast majority of his contemporaries believes that carcinoma is a sequel of malignant degeneration of a chronically inflamed or ulcerated gastric mucosa.

Clinical support was given to these theories of Hurst by G. A. Lintott and Herbert, who followed up the observations of Cramer on the increased incidence of gastric carcinoma in the working classes and particularly in a comparable group in Holland, where the incidence is more than double that found in England. From an analysed series of test-meal findings Lintott concluded that there was no underlying difference of gastric secretion in the English and Dutch groups. Lintott further concluded that extrinsic factors must be responsible for the increased incidence of gastric disease in Holland. This question was taken up and confirmed by Herbert, of the Guy's Hospital Dental Department, who found that oral sepsis, masticating habits, spiced foods and tobacco excesses accounted for the extrinsic irritant factor in the Dutch group. These observations, together with the similar investigations of W. N. Mann in Sweden, where the mortality from gastric carcinoma is also high, are in support of Hurst's view that primary chronic irritation is probably mainly responsible for the later sequela of gastric inflammation. He believes that it is reasonable to assume that the more frequent and more severe irritation of the gastric mucosa in the Dutch and Swedes leads to a greater incidence of achlorhydric gastritis in individuals with the hypochlorhydric gastric constitution and of gastric ulcer in those with the hyperchlorhydric constitution. If his views as to the origin of carcinoma of the stomach are correct this would explain why its incidence is so high in these peoples.

From this rough survey of the natural history of the disease it would appear that several points, both of some ætiological importance and diagnostic value, stand out. First, there is the significant age-group in which gastric symptoms call for special attention. Then there is the increasing evidence that there is some heredity or familial liability to develop lesions of the stomach—an intrinsic factor, which Hurst calls a "constitutional organ inferiority," and which may be coupled to what Cramer refers to as a constitutional susceptibility to cancer in general. Thirdly, there is the most important extrinsic factor in the form of chronic irritation, in the absence of which Hurst believes that the organ would escape disease.

If these conclusions of Hurst and others be correct—and they are supported by the present consensus of medical opinion—then they should have a special bearing on the physician's outlook and his clinical approach towards the diagnosis of the disease. It is for this reason that so much stress has been laid on the natural history of the disease and the back ground from which it arises.

We are not here concerned with the patient who presents a text-book picture of emaciation with the classical physical signs of malignant disease; we are chiefly interested in tackling the problem of a chronic inflammatory lesion of the gastric mucus membrane and in having to decide whether we suspect the presence of malignant degeneration or the likelihood of its occurring. We are concerned then, chiefly with the differential diagnosis of early carcinoma from chronic gastric ulcer and chronic gastritis rather then from the more uncommon diseases which might give rise to difficulties occasionally, and therefore must not be forgotten. Examples of these are: Innocent new growths of the stomach; pernicious anæmia; the nervous dyspepsias, such as anorexia nervosa; and, rarely, also, such extraneous conditions as carcinoma of the pancreas and inflammatory adhesions in the region of the gall-bladder can cast suspicion on the stomach by causing apparent filling defects in the X-ray picture and giving rise to some dyspeptic symptoms.

The clinical approach itself must be prefaced by a careful and thorough history, paying special attention to the sometimes trivial subjective symptoms which should be particularly recorded and assessed.

Conclusions drawn from several series of histories by a group of American investigators show in retrospect that, although in some cases distinctive early symptoms may seem to be lacking, yet in the majority of cases the trail is there, the physician simply fails to find it or, having found it, fails to follow it, rejecting it as unworthy of fuller investigation, while the patient pays for this error with his life.

The physical examination at this stage will be principally negative. However, it must be carried out thoroughly and systematically, for it is particularly true in cases of so-called " stomach trouble " that a great many morbid, functional and organic states find expression in disorders of the digestive tract. The patient himself may look perfectly healthy or he may appear off-colour with a furred tongue and the suggestion of slight anæmia or loss of weight and a suspicion of lassitude.

The physical examination will not be discussed at length because it is presumed that in early diagnosis the clinician will have to depend almost entirely on the history and symptomatology to make his decision. Many cases have been recorded when the patient looked perfectly well even when a large mass was palpable in the abdomen. In such a case, probably a middle-aged man, mild dyspeptic symptoms presumably persisted for some time, barely noticed and untreated, and there must be many such cases. It is because of this group that an obligation falls on the medical profession to educate the lay public of this age-group to seek medical advice even on trivial but persistent digestive symptoms. This does not entail instilling a cancer phobia, but rather the attitude of a dental patient who seeks early treatment for a carious tooth rather than face a later extraction.

On one occasion when Mr. Ogilvie was in America he amused his audience by suggesting that early diagnosis of gastric carcinoma would be benefited greatly, if restaurant proprietors could be persuaded to display warning notices in prominent places urging their middle-aged clients with indigestion to seek a medical overhaul.

Passing on to a consideration of the early symptoms it is no exaggeration to say that they are many and diverse. They may crop up in any combination or permutation. There is no symptom always present and, likewise, none that may not sometimes be absent. Professor Ryle rather aptly regards symptoms as the morbid physiology of bedside medicine. He argues that they usually precede the development of signs, and that each symptom expresses a perturbation of some normal function, an exaggeration or a depression of a healthy vital reflex. And he believes that diagnostic achievements depend more often upon a proper appreciation of subjective symptoms than upon any special skill or training in the methods of physical (*and special*) examination. For example, flatulence, one of the commonest symptoms of daily practice, may be due to trivial functional disturbances or more serious organic disease. If odourless it may be difficult to decide, but if the eructated gas smells of H_2S, gastric stasis is always present and the symptom is of diagnostic value in pyloric stenosis. Heartburn is another common but elusive dyspeptic symptom. It is usually not associated with organic disease but rather with hurry and worry, of alcoholic excesses and anæmic dyspepsias. Even " hiccups " might be mentioned in this connection, as they may occasionally be of evil import and regarded as a reflex consequence of gastric irritation.

" Probably in no group of diseases do we have to rely more upon subjective symptoms than those collected under the general heading of the dyspepsias."

With regard to the individual symptoms a long list will not be mentioned, but rather the common clinical symptom-complexes met with in practice.

In 1928 Moynihan described four clinical types and efforts are usually made to classify any given series of cases into clinical groups. Several different complexes of presenting symptoms can be considered :

(1) A common syndrome is the vague indigestion of recent onset, and the gradual downhill course in a patient of advanced years.

(2) In another type the symptoms mimic those of gastric ulcer. At first relieved by treatment but soon progressing regardless of it.

(3) Sometimes there is a history of chronic indigestion of indeterminable character with recent change of symptoms both in degree and kind.

(4) In a few cases there are probably no definite symptoms of indigestion, but the patients gradually lose weight and strength, presenting the clinical picture of malignancy without symptoms pointing to the stomach as the site of the lesion.

(5) In some cases the evidence of pyloric obstruction heralds the presenting symptoms of a lesion in the pyloric region, and dysphagia of a lesion in the cardiac area.

(6) In another group severe anæmia may be the outstanding feature and the question may arise of a mistaken diagnosis of pernicious anæmia.

(7) In rare cases there are no symptoms until metastasis occuers.

Further examples of clinical types may be taken from an American series of 758 patients. From this series there was a significant group in which, on a basis of previously sound and robust health, digestive symptoms were superimposed. The clinical history was roughly as follows: At first there was epigastric discomfort unrelated to food. Later there was pain increased by food. At first there was merely nausea, or the regurgitation of mucus, followed later by vomiting and, in some cases, much later by the vomiting of food eaten at some good time previously. Even in two hundred of this group there were almost a dozen different clinical syndromes. For a second group the patients gave a typical history of gastric ulcer. In another large group the symptoms were vague and undetermined. These patients ceased to enjoy life. There was malaise, they lacked strength, they did not care for their food. Digestive symptoms appeared late.

These various clinical types have been specially cited to show how the clinician has ever to be on the look-out for the possibility of cancer of the stomach cropping up under the cloak of a variety of disguises.

In making the diagnosis the following clinical observations are significant:—

(1) The combination of advanced age and recent onset of symptoms.

(2) A general change in character of the patient's symptoms. For example, one of the chief differences between the ulcer history of a benign ulcer and the history which betokens cancer is that the intervals of remission are typically lacking in the case of cancer.

(3) The character of the pain—that most important symptom of all. The typical pain of gastric carcinoma does not come on in relation to food, but tends to become continuous and is aggravated by food or vomiting. A change in character for the worse suggests either deeper penetration of a benign ulcer or its malignant degeneration or both.

(4) The failure of medical treatment. Unfortunately the majority of early carcinomata respond briefly before pursuing their downward course.

(5) A family history of gastric ulcer or carcinoma

(6) A loss of weight which, in the opinion of the physician, is unwarranted by the patient's symptoms and history.

The special investigations will be dealt with later, but it is well to note here that, vital as the localising X-ray findings are, a negative picture is no proof against an existing neoplasm. Its eye is never analytical and, if the possibility of a cancer be suspected, a negative picture should never halt further investigations. Similarly, occult blood may be a definite indication of ulceration, but is of no value in demonstrating either its position or nature. Even the gastroscope has its limitations and often fails in the very cases in which we are in need of its aid most of all.

Since there is clearly no specific test or clinical investigation upon which utter reliance can be placed in the early case, and since the very excellence of modern laboratory and special technique introduces the danger of overlooking even more reliable subjective or objective evidence, we are driven back to purely clinical considerations on which our judgment should principally be based.

On this basis there is only one plan of campaign that is clinically reasonably safe—that is, to regard as dangerous any indigestion, with or without other symptoms, which appears after middle-life, acute or insidiously in a previously well person; to regard as cancer any acute digestive disturbances within this period which are superimposed upon chronic digestive disturbance and which do not respond promptly and permanently to routine measures which have previously been successful; to regard with suspicion such vague symptoms as fatigue, malaise, mental apathy and loss of weight, even though gastric symptoms be absent; to continue to regard as dangerous any one of these clinical syndromes until it is proved beyond doubt not to be cancer; to make the diagnosis with the aid of special investigations, but never on the basis of them; and, finally, to resort to exploratory laparatomy if the diagnosis cannot be made without it.

REFERENCES

Proc. Mayo Clinic, **15**, 625. 1940.
Walton. *Lancet*, **1**, 1101, 1936.
Journ. Surg. Gyn. Obst. January 31st, 1941.
" Cancer and Precancer." *Lancet*, March 8th, 1941.
" Carcinoma of Stomach." *Journ. Amer. Med. Ass.*, January 21st, 1941.
Moynihan. " Cancer of Stomach." *Practitioner*, **121**, 137–148. 1928.
Finsterer. " Malignant Degeneration of Gastric Ulcer.' *Proc. Roy. Soc. Med*, 32, 183–196. January, 1939.
Harveian Oration. " The Time has Come." *Lancet*, **2**, 949. 1937.
Hurst, A. F. Schorstein Lecture. " Precursors of Carcinoma of Stomach. 1929.
——— *B.M.J.*, ii, 665. 1934.
——— " Carcinoma of Stomach." *Lancet*, ii, 1455. 1937.
——— " Carcinoma of Alimentary Tract." Address before Swedish Med. Soc. 1939.
——— " Subacute Ulceration of Stomach with Achlorhydria." *Guy's Hosp. Rep.* 1939.
Lintott and Herbert. " Etiology of Cancer of Stomach." *Guy's Hosp. Rep.*, 1936.
Mann, W. N. " Cancer of Stomach in London, Stockholm and Amsterdam." *Guy's Hosp. Rep.*, 1939.
Maingot's " Text-book of Post-Graduate Surgery."
Eusterman and Balfour. " Diseases of the Stomach."

Sector News

Guy's Letter

THE " wide open spaces " that are so characteristic a feature of the Borough landscape are increasing as the demolition work goes on. The charred shells of timber and metal which have created such a chaos of ugliness are giving way to undulant fields of rubble and dust . . . and, alas, now the gaze of Thomas Guy, as he stands in robed serenity, is no longer confined to the beauty of our Georgian forecourt, but extends far over the debris of the Superintendent's House and Courtroom, a view broken only by the silhouette of a lone plane tree. The strength of these walls that have stood so well the test of pickaxe and crane pays a fine tribute to the skill of their builders.

Yet a happier note sounded when a swimming Gala was held a short time ago. It began with a team race to settle the ancient rivalry between physician and surgeon. The latter won, although slight confusion existed owing to certain swimmers tending to take a diagonal course in the bath. Then followed a medley of events, amusing in their variety. On one occasion the ladies started an egg-and-spoon race, which was suddenly interrupted by several members of the audience falling into the water, including one sister. If an extra ration was the quest, we must condemn their lack of restraint, and, though one egg sunk, this was small proof of its edibility. The climax of the evening was reached in the pundits' free style race. The victory went to Dr. Bishop, but the other swimmers finished together in an exciting tie. Professor Ryle doing a graceful side-stroke; Mr. Slesinger, a vigorous trudgeon; and John Blaikley, well, of course, the honest breaststroke. After this the nurses entertained us with refreshments and a dance, which made a most enjoyable evening.

Nuptial news is fast flowing in as the mischievous offspring of Venus flings his darts throughout the sector, a theory that we still hold in spite of the ruthless analysis of the psychologist. We all send our hearty greetings to Sisters Crust, Pitt and Wilson, who are marrying during this month. The last two are keeping to an old tradition, while Sister Crust is favouring the Army.

Dr. Keedy is " going down very well," if he will pardon the familiarity. He has now been joined by Mr. Caturani, who is more interested in surgery, and we extend the same welcome to him. " Gee, it's swell ! " is Keedy's opinion of Guy's, and we hope that the latter will soon be of the same mind.

P.S.—We are able to dispel the fears of anyone who thought that an invasion was in progress when the shouts from two military figures were heard in Nuffield House. One, particularly, was regarded with deep suspicion owing to an unusual arrangement of the belt and Sam Browne, as well as a Celtic accent. No, gentle reader, not an invasion, but our friends who called to see us on their way to Aldershot.

C. F. H.

Farnborough Letter

EVER since the outbreak of war one of the most familiar figures at Farnborough has been that of Mr. Walter Gilford. Officially designated as an anæsthetist, his versatility has enabled him at various times to function also as house surgeon, house physician, resident obstetrician and, more recently, as Surgical Tutor. His activities on the tennis-court, at the bridge-table and at billiards and in the local place of refreshment have helped to spread his fame, so that his departure will leave a big gap in recreational as well as the professional circles here. For the *homme de destinée* in Orpington has said the word and our adaptable anæsthetist has been transformed into a surgeon and whisked away to Dartford.

In order that Mr. Gilford might sing his swan-song in suitable surroundings the waterside dwelling known as " Tall Trees " shed for a night its wonted sober mien and became the scene of dancing and revelry. The barrel was rolled out (having been previously rolled in by Mr. Rawlings) and a distinguished company foregathered to wish our erstwhile colleague every success in his new job at the Southern ; incidentally a good time was, we believe, had by all.

V. C.

Pembury Letter

THE gates of Pembury have recently been half closed to the outside world and any vehicle larger than a pocket Austin must now await the whim of the porters before entering. This seems to be part of an inquisition on all who pass these gates, in which the most innocent may be condemned. One poor lady, after trying to force a passage without success in order to fulfil an appointment with one of the surgeons, had to write for a pass which she hoped, with the aid of her birth certificate, identity card and passport, might, after submitting to a search, allow her to proceed. However, all this difficulty could be easily overcome by the introduction of a system of secret signs or passwords (" Mr. S.", for instance, for our exhausted patients). This could be changed at eight every evening so as to exclude students, who are now not trusted in the hospital after that hour except when some use can be made of them.

We are pleased to see the masterful Hugh back again after a well-earned holiday and present him with our tardy congratulations on his success in the M.S. Unfortunately he returns to find that he still cannot take up residence here. The new Residents' quarters, which were to be ready shortly quite a long time ago, are still in the hands of the painters, who, we are told, having at long last received some paint, now wait for the wherewithal with which to apply it. A deputation is being formed to receive the expert opinion of Ivor Thomas on the likely length of this labour.

A recent convoy of patients from London contained one whose chest, according to her notes, contained " scattered rhales and bronchi." Diagnosis of the former seemed " rehally rhathah rhash," but the presence of the latter we were prepared to accept after no evidence of interference at Preston Hall or Horton could be found.

G. L. L. R.

Orpington Letter

HARDLY a week passes but that the Hospital is convulsed with some fresh complication with regard to the accommodation of patients. The latest complication has been the sudden influx of officers from the R.A.F. and the Army, until saturation point was reached. We have been promised fresh officers' accommodation in the New Block, and we dare to hope that it will not be long before the work is started. The sight of our senior officers almost literally tearing their hair with worry as each new and higher-ranked officer is brought into the Hospital is almost more than we can bear.

Due to a larger number now living in the Mess we have to report that, for the moment, the model railway is not functioning, because one of the tables upon which it was mounted has had to be commandeered to extend the dining table. We hear that the railway, true to Mr. Batchelor's description of same, *i.e.* a malignant growth, is to be further extended when arrangements have been made for the securing of further support for the track.

Social activities in the Mess appear to have started again. In the last few weeks one tennis party has been held, the competition being won by Mr. Laurenson and his partner, Sister Green. Perhaps this is not to be wondered at considering that our Divisional Surgical Officer has already surrounded himself with fame on the courts in former days. This was followed by a very enjoyable going-off dinner and dance.

The fact that an Orpington Letter has not appeared in the *Gazette* for the last few weeks is due to the loss, much to our regret, of our Letter writer—Mr. Brian Johnson. He has left us with no immediate prospect of joining the Forces, and we were amazed to hear some days after he had gone that he was, of all things, an Orthopædic House Surgeon at Gravesend Hospital. Whether this is a temporary appointment or not, the writer does not know. All he can say is that Brian appeared to be terrified of the imminence of the visit of the consultant Orthopædist.

Our other loss was Peter Swift, who, we understand, is joining the I.M.S. in company with several others in the very near future.

In their places we welcome four new House Officers — Messrs. Gill, Stead, Watson and Hutchinson. We hope that they will enjoy their sojourn at Orpington.

We would like to congratulate Miss Marriott on her appointment as Matron at Orpington Hospital, and hope she will not find the work too arduous and difficult.

H. G.

Southern Letter

YET another Surgical Registrar is about to leave us. Mr. Laycock says a final good-bye to-morrow and, next week, leaves for China for service with the International Red Cross.

Even though his before-breakfast rounds and ten-hour theatre stretches were ideals not shared by all his colleagues, to be admired rather than encouraged, we shall miss him greatly, and sincerely hope that we are destined to meet him again in the future.

We are very happy to welcome Mr. Gilford, and hope that the mealtime conversation together with the clinical material available will amply satisfy his surgical bent.

The hospital is now, once again, to have two surgical registrars—a very necessary state of affairs, and we should like to take this opportunity of congratulating Bernard Lilwall on being chosen to fill the vacant position. At the same time we would point out that a Guy's man, as surgical registrar, even if not at the Alma Mater herself, must behave like the accepted prototype, and we shall expect to see the corduroys, even Daks corduroys, giving place to the regulation black homburg.

Next week we hope to start working in the rebuilt theatre block. The finished result is, indeed, a marvel or architectural ingenuity. An infinite number of small rooms fitted with a multiplicity of intercommunicating doors provides a complexity, in comparison with which Hampton Court is mere child's play. Arrangements are in hand for engaging the services of suitably trained stoats, which will be employed for the removal of patients when other and more usual methods have failed.

The Southern has recently achieved the distinction of embracing an official orthopædic unit in the E.M.S. Such recognition must be justified by even better results. In this connection it is high time that official physical training instructors be appointed by the naval and military authorities, to provide proper graduated exercises for those cases requiring them, and to take classes in physical training for all patients whose state of health permits.

At present the half-hour or so a day provided by an already overworked massage staff is inadequate for Service cases, who spend the rest of the day doing nothing. Proper physical training would do much to maintain general health as well as providing local physiotherapy to the injured joints and muscles concerned, and should be supplemented by really well-organised occupational therapy.

Although the latter is provided the general impression gained is that it provides bored patients with something to do, should they so desire. It is certainly not, at the moment, an officially organised form of therapy put to its proper use.

H. P. G.

The Dental Officer

THE trials of a regimental Medical Officer recounted in the last edition of the *Gazette* have persuaded me that the lot of the Dental Officer should be told.

The Dental Officer, unlike the Medical Officer, suffers from no lack of patients; in fact, in the stirring days after Dunkirk he was likely to find the waiting room at his Dental Centre full up, and an impressive dental parade lined up in the street outside. I remember an ill-assorted parade of recruits, still in civilian clothes of varying hues, stretching, it seemed, indefinitely up the road, attempting very inadequately to comply with the none too polite requests of an N.C.O. Some days later these same recruits in uniform khaki paraded in a far more orderly manner.

Then (and even now) the Dental Officer frequently had to inspect as many as two or three thousand men, often in the strangest places. On one occasion the only facilities available to me were a table under a canvas awning on a parade ground, where two hundred men were lined up. An aluminium bath and some water were eventually obtained and a liberal dose of lysol, which I had thoughtfully brought, was added. This latter gesture was a concession to the principles of asepsis.

On another occasion I inspected two thousand men in a derelict cotton mill in the North of England with the rain dripping through the rafters. Then, on more Spartan occasions, I have inspected the men on gun-sites and searchlight emplacements, with snow on the ground. At these times I never removed my greatcoat.

Now, however, most of the men we see have had some treatment. It is, therefore, no longer a question of "the greatest good for the greatest number," and there is time to make sure that no interstitial caries is overlooked or hasty decision made as to the fate of a tooth.

Although the equipment issued is adequate for routine treatment, it is not expected to meet the requirements of unerupted wisdom teeth, cysts, etc., and if these are operated on at the centre considerable ingenuity is required. Nor is it an easy matter to obtain X-ray pictures, and it is even harder to obtain pictures that can be interpreted as anything but a surrealist impression in black and white.

All Dental Officers are sent at some time or another to Aldershot for the course in the treatment of maxillo-facial injuries. This excellent course is given by an old Guy's man, Lieut.-Colonel "Sammie" Woods. It is notable, not only for the fund of excellent stories which intersperse the very interesting lectures, but also for the amazing antics performed by limbs and joints, long cramped in the too close confines of the surgery, and politely termed "squad drill." Many a man, never known to fail with an inlay has delighted the seasoned troops, gazing over the railings in search of entertainment, by turning left when instructed to "right about turn," and has later often wondered just what that "nice sergeant" thought of him for arriving at the attention several seconds after the rest of the squad. In fact, many of us, after these martial interludes, prefer to carry on conserving or speeding the departure of teeth even if, as in the case of one officer attached to a field ambulance, this has to be done in the middle of the "cold open field."

D. J. L.

An Emergency Doctor in the R.A.M.C.

LAST week a dead cat was found in " C " Company well. The forensic question as to whether the animal had succumbed as a result of misadventure or suicidal intent, or whether its end had been encompassed by some person or persons unknown, did not in this case arise. The point was what were " C " Company going to drink. They leave that sort of thing to the Medical Officer. It was up to me to decide.

The R.A.M.C. manual has a lot to say about emergencies of this kind. In fact, it devotes a considerable number of pages to the contamination of wells by a diversity of foreign matter, ranging from dead sheep and cow-droppings to village abortions and mustard gas. It is on the subject of treatment, however, that it tends to fall down. Not that it lacks a variety of specific suggestions. Far from it. The only difficulty is that its views on this aspect of the problem incline towards the academic. The theoretical side, some might say, is stressed unduly. Four-inch hoses are mentioned. Steam-driven suction pumps figure largely. Also such items as gangs of workmen, suspended on rope ladders, working eight-hour shifts for a fortnight. These amenities are hard to come by in a primitive mountain district.

Meanwhile " C " Company was thirsty already. Soon it would be very thirsty indeed. In these crises the locals are not helpful. For some thousands of years they have seen their village pond in constant use for all purposes, with no harm to anyone, and they fail to understand what all the fuss is about. After all, what is a dead cat more or less in a well that has been for untold generations the traditional receptacle for surplus kittens from all over the neighbourhood.

But " C " Company were of a more delicate breed. They didn't like it. Moreover, they expected me to put it right.

My first step was to remove the animal and secure its burial elsewhere. This was an important move I felt, although not mentioned in the treatise. Next I set about estimating the volume of water in the well; and then I simply dropped in as much of the chloride of lime as the book recommended for a decontamination on the dead horse scale, thus preserving what seemed a nice margin of safety to compensate for the lack of fancy work in the matter of emptying and refilling.

Half-an-hour passed rapidly, the time officially declared to be enough for the powder to perform its hygienic mission. There now remained the fundamental criterion of the biological test. It was becoming increasingly apparent that somebody had got to be the first to have a drink. The Company eyed me expectantly. Everybody seemed to feel that I hadn't put in very much stuff. It hadn't looked much to me as a matter of fact. Certainly it must be remarkably potent if a mere handful like that could neutralise a dead horse. But, as I pointed out at some length, the calculation was all right, especially the πr^2 part.

Unfortunately it was obvious that the Company remained unconvinced and was cynically awaiting further proof. They stood silent, as men who say, " Well, maybe, but suppose you try it first if you're so sure." Clearly there was nothing else for it. The head cook nimbly drew me a half-pint sample. Miserably, feeling like Socrates at his bad moment, I gulped it down. " C " Company, surprised but reassured, began to feel for its water-bottles.

But I'm still wondering. It's only five days ago and there are several little troubles that might be on the way. Cholera, to take an example at random. What on earth is the incubation period ? And I've had some rather queer feelings lately. What fun the R.A.M.C. provides for its doctors !

I. McD. S.

An Evening on the Thames

WE went down to Hammersmith one evening after dinner. It takes just half-an-hour by Underground from the Monument. Frankly, I did not expect sailing on the Thames to be much fun—exciting, perhaps—but not a holiday. I had spent many happy days sailing at Burnham, exploring creeks up the Roache or beating up the Crouch. There was always a wind over the flats and one could be certain of a grand sail over the week-end in those pre-war days. But the Thames, with its traffic and bridges, with buildings and trees blanketing the breeze—well, for two years it hadn't seemed worth bothering about ! The London Corinthian Club had granted hospitality and membership to the United Hospitals Sailing Club since the outbreak of war and many of the dinghies had been brought up from Burnham, but it seems that many members have been about as disinterested as I have been.

When we arrived at the club we decided to take *Tern*, so we collected the gear from the boathouse, launched her and set off at 7.50 p.m. on the rising tide. Our object was to sail up on the flood and return on the ebb. There was a fair breeze from the south bank as we cast off and, heeling to starboard, we raced across the river to windward and, easing off, sailed the first reach in great style with a beam wind. It was grand to feel again the pull of the main sheet as we raced up river on the tide. As we came up to Barnes Bridge the crew lowered the peak and, although we were luffed with the wind ahead now, our way carried us rapidly through the arch and we were quickly under way again tacking up the next reach. A trail of barges passed well clear of us and we dipped gracefully in the wash, but a few minutes later a lonely tug came close with evil intent and threw up a wash which both skippers appeared to find incredibly amusing. The crew, however, managed to do the necessary bailing before their duties were required on the halyard at Chiswick Bridge, which we again shot easily. There was now a delightful stretch of wooded bank as we approached Kew on the slack water of high tide, and, with the ebb turning against us, we just managed to reach Strand-on-the-Green; we brought up at the steps of the "City Barge," where a mild-and-bitter and twenty-Players came almost as a prize of rarest gold. . . .

In due course we set sail for home on the falling tide and made good progress against the wind which was now dropping away until, after passing Barnes Bridge, the wind died away altogether and we could do little more than drift towards the club pontoon which we reached in very short time. *Tern* was quickly beached and the gear stowed before retiring to the bar for "the other half." Here I learnt that for those who prefer it there is racing every week-end, while for the others a sail such as we had just had could always be obtained for a couple of hours around high water. I came away feeling that this new home for the Sailing Club was a pleasant substitute for Burnham in these days of restricted travel and less off-duty time, with the great advantage that a sail was always available in spare time during the week—even after a busy day. Other members of the Club, and potential members, may like to sample it. It was a good evening—to be repeated, p.r.n.

D. E.

Hospital Information, etc.

Notice

EXAMINATION FOR THE LEONARD LUBBOCK PRIZE IN CLINICAL PATHOLOGY.

AUGUST, 1921.

The following award has been made :—

R. J. W. Rees, prize.

EXAMINATION FOR THE GOLDING-BIRD MEDAL AND PRIZE IN BACTERIOLOGY.

The following awards have been made :—

F. M. P. Eckstein, gold medal ; F. M. P. Eckstein and A. J. Shillitoe, prize £29 divided ; R. J. W. Rees and J. Wilks, certificates.

GUY'S HOSPITAL DENTAL SCHOOL.

PRIZE EXAMINATIONS, 1941.

The following awards have been made :—

Newland-Pedley Medal and Prize in Operative Dentistry.

M. A. Kettle, medal and prize ; N. A. Power, certificate.

Final Year Prize.

N. A. Power, prize ; E. Horne, certificate.

Prize in General Subjects (including Medicine, Surgery, Bacteriology and Pathology).

E. Horne and N. Stark, bracketed equal ; prize divided.

Second Year's Prize in Dental Subjects.

A. W. Bevis, prize ; A. D. Robinson and L. J. Leggett, certificates.

David Frank Sturdee Prize for Dental Prosthetics.

A. D. Robinson, prize.

Prize in General Anatomy and Physiology.

H. S. M. Crabb, prize ; J. C. Howe, certificate.

Changes of Address

R. J. G. Grewcock, Captain A.D. Corps, 4, Alexander Road, Farnborough, Hants.

Sir William Hale-White, K.B.E., 24, Warnborough Road, Oxford.

N. L. Lloyd, M.B., B.S., Medical Dept, Rolls-Royce, Ltd., Crewe.

O. Marrott, M.D. c/o Dr., F. N. Collier, Grocers' Hall, Princes Street, E.C.2. (Tel. : City 7060).

Appointments

A. Churton Taylor, M.R.C.S. L.R.C.P., Police Surgeon, Southern Division, Portsmouth.

Births

INGRAM.—On August 16th, 1941, to Mary (née Woodhams) and Frank Ingram—a son, David Longden.

Deaths

ROBBINS.—August, 1941, at Paignton, Randolph William Robbins (Guy's First Registrar), age 70 years.

KERR.—August, 1941, John Cordy Kerr, M.R.C.S., L.S.A., at Claremont House, Wickham Market, age 86 years.

EDS. {N.A.N. / B.S.L.}

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry
and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *6th September* 1941 *Number* 1386

PASSIM

RECENTLY there has been a huge increase in the call-up of hospital medical officers to the Services. The usual reaction to this is to say, " What a waste of medical personnel ! " but, in point of fact, such is far from the case. It is true that for the time being the affected individuals will remain comparatively idle, but the real power of our Army must be interpreted in terms of potential energy. Just as thousands of aeroplanes, tanks and ships are being produced to increase the strength of our armed forces even though the raw materials could be used for domestic necessities, so our man-power must be organised in instant preparedness for major warfare, and hence the transferring to the Services of civilian doctors who at present are doing useful and essential work. What is very curious is the comparative immunity of the medical officers employed by the London and Kent County Councils from this national service.

◆

ELSEWHERE in this issue appears a letter signed by the senior students of the Guy's Sector, expressing the generalised dissatisfaction that exists over the system of appointment of house officers. While there may be a certain amount of justification for their statements, it is necessary for everyone to realise the unparalleled circumstances which exist to-day and that Sector Headquarters spare no effort to allocate each man to a job as fairly as is possible. As has been and always will be the case some jobs in life are worth having and many others are not. What our students are endeavouring to point out is that the majority of them are personally unknown to those in charge of their distribution and, accordingly, there is the tendency for some men to suffer unjustifiably. While in general this is not found to be the case, the explanatory statement issued from Boundary House should be appreciated by all concerned.

THE demolition workers at Guy's are proceeding according to plan on the Counting and Superintendent's House, but their efforts are not met without some resistance. The stout walls were built to last, and Thomas Guy, who stands unscratched in the quadrangle, must chuckle to himself again and again as he watches the modern machinery straining and struggling to dislodge what he built centuries ago. It is to be hoped that he will be satisfied when he sees what is to take its place at the end of the present conflagration.

◆

DURING the last fortnight a mock gas attack was staged at Guy's Hospital. Although the likelihood of chemical warfare is a matter for discussion, one of the strongest arguments against such a possibility will be our preparedness for it ; in this respect Guy's excels. The system of management of contaminated patients has been fully described by Dr. P. M. F. Bishop, and to witness the whole process in operation from the admission and classification of patients to their subsequent decontamination and resuscitation is very instructive indeed and might well serve as a pattern to be copied by others.

◆

WE hasten to offer our sympathy to Miss Rawlings over her recent accident. Her absence from the female V.D. department is a great loss, but we are assured that her convalescance is an uninterrupted one and that her return here should be soon. We all join in wishing her a speedy recovery.

◆

IN addition to the list of contributions to the symposium on sulphonamide therapy, we are pleased to announce that Mr. Gibberd is to approach the subject from the obstetrical point of view with a paper on puerperal sepsis.

The New Chemotherapy

By John A. Ryle, M.D.

IT would probably be no extravagance to claim for the sulphonamide group of drugs, as was once claimed for the discoveries of Pasteur and Lister, that they will succeed in saving more lives than all the wars can kill. It would certainly not be rash to prophesy that during the period of the present war they will prove to have saved lives, relieved suffering and shortened periods of hospitalisation on such a scale as to make previous advances in medico-chirurgical practice (excepting only those due to Pasteur and to Lister) appear small indeed. The mortality and morbidity of pneumonia, cerebro-spinal meningitis, erysipelas and puerperal and other forms of streptococcal septicæmia have been so far reduced as to alter our whole attitude to these dangerous diseases. A reduction, for instance, in the mortality of cerebrospinal fever (always with us in sporadic form and in war-time especially giving rise to alarming epidemics in camps and barracks) from 30 per cent. or upwards to 5 per cent. and under has been clearly shown. Had a treatment as successful for this disease alone been reported it would have been epoch-making, but we have witnessed instead the arrival from the laboratories of a drug, capable of ready administration by the mouth, which with its associate compounds has already been proved effective in all the serious infections due to the common pyogenic cocci with the exception of the fevers of staphyloccal origin. Apart from the " killing " diseases, gonorrhœa, which has caused so much ill-health and so much mental misery in both sexes and the troublesome local infections of the urinary tract with bacillus coli communis have also found a more potent counteragent than any previously known. Living within the epoch we have hardly yet appreciated the benefits which the new therapy has conferred and will continue to confer upon medicine and mankind. Vaccination, anti-typhoid inoculation and salvarsan may one day seem small discoveries beside that of sulphanilamide, which was first shown to have therapeutic possibilities in the case of streptococcal infections only six years ago.

Before 1935, although chemotherapy for certain of the protozoal diseases of the tropics and for syphilis had been firmly established, we had almost despaired of finding a comparable answer to the much more prevalent and collectively lethal bacterial diseases. The problem of evolving a chemical which would encompass the destruction of organisms *in vivo* without provoking serious damage to the living cells of the infected person or animal had seemed insuperable. The failure of all attempts at local antisepsis in a wound was equalled by the failures of systemic antisepsis. So far as we were able to speculate we visualised some chemical substance which would in all probability need to be administered intravenously like the arsenicals and antimony. Instead we have been presented with tablets which can be washed down with a drink of milk or water and which cut short the majority of cases of pneumonia, meningitis and gonorrhœa in a few days and limit the course and diminish the complications of many of the septic fevers when properly spaced and given in adequate dosage and with certain relatively simple precautions.

Given without these safeguards, on the other hand, we know that we may fail to cure, cause troublesome or serious symptoms in our patients, or, in very rare instances, bring about their death. There are few procedures in medicine or surgery of a radical and specific kind which do not carry with them certain risks, but once these risks are understood they rarely, in fact, do harm. As with all other potent weapons, however, the inexperienced or the ill-informed may fall into one of two errors—that of using the weapon too timidly or to excess. Either error will tend to bring discredit, not only to themselves, but also to the treatment. And there is one further error, namely that of employing the weapon for conditions for which neither experiment nor experience has justified its use. All these mistakes have already been made with the sulphonamides, and if the present series of articles which the Editors of the *Guy's Hospital Gazette* have invoked serves one good purpose—and it should prove instructive in many other ways—it will be that of helping to clear the minds of those who have not had access to the ever-increasing literature of the subject in regard to the dos and don'ts of the new chemotherapy; of helping, in fact, to indicate not only how misjudgments in the matter of quantity and spacing can be avoided, but how frank misuse should, through knowledge of the true indications, be finally checked.

In the articles by various members of the Guy's Staff which are to follow accounts will be given of those diseases in which suphanilamide (or a derivative) is of known value, of the appropriate dosage in each instance, of the stages of the disease in question in which it is best given and beyond which it should not be given, of the dangers of too long an administration and of the symptoms and signs of toxic action. Clinical, chemical, pharmacological and bacteriological aspects of the subject will all come under review. Only the newer surgical indications arising from experience with war-wounds will for the present be held over because some of them must still be considered *sub judice*. It may here, however, be stated that, apart from its per-oral use in the hæmolytic streptococcal infections of an acute kind in which it was originally employed, it is becoming increasingly apparent that sulphanilamide is also effective locally as an inhibitor of bacterial growth in wounds and on raw surfaces such as result from severe burns. By this action plastic surgery has already been very materially assisted. While it may assist, however, it can never replace the skilful and timely use of the knife and plaster in war injuries.

Perhaps the most misguided use of the sulphonamides has been in the direction of employing them as though they were a panacea for any illness accompanied by fever or manifesting any symptoms which an uncritical imagination might presume to be due to infection ; in other words, of employing them without making a serious attempt at accurate diagnosis. This is to neglect one of the most important principles in medicine. To employ a remedy of a specific kind in a condition in which no specific diagnosis has been arrived at or at a stage of a disease at which diagnosis is still in doubt or impossible is obviously unsound. Several things may happen if such a course is adopted. The patient may get well and the result be wrongly attributed to the treatment. He may get worse because the right treatment has not been employed. He may be made ill in other ways by the treatment itself (when the remedy is of a potent kind with disturbing side effects) and so present a confusing picture. The picture may, in fact, be so far modified by the treatment inconsiderately applied as to increase the difficulties of diagnosis and interfere with subsequent treatment whether the disease be one in which the drug was indicated or not. In these and other ways those who use the new chemotherapy without that judgment which remains the most difficult part of our art lay up troubles for themselves and their patients or for colleagues who are later called in consultation. In a recent winter the wife and child of a friend of the writer's had sulphanilamide prescribed for them, the first on account of a simple synovitis of the wrist, the second for a mild attack of influenza, the doctor assuming that two diseases which are not known to have any such ætiology " might be streptococcal." A house-man was shocked by a surgical chief in a special hospital who airily prescribed the drug for every post-operative rise of temperature. In a case of appendicitis recently admitted to this hospital the doctor, when still in doubt about the diagnosis, had given sulphanilamide or sulphapyridine, an action which might have modified the symptoms and made the diagnosis more difficult or even have delayed a very necessary operation. These remedies, however, are most indiscriminately prescribed for fevers of uncertain causation, thereby eliminating the possibility of a diagnosis in some and postponing it or making it difficult in others. In the process few patients are benefited, nothing is learned and a slipshod mode of thought and practice is established.

The following is a good example of the confusion of thought and action and the unnecessary undertakings from the patient's point of view which may result from misguided chemotherapy. A young man developed pain in the right flank and a fever. His doctor, without obtaining cytological or bacteriological confirmation from the urine, diagnosed pyelitis and prescribed sulphapyridine. Within forty-eight hours the patient became delirious. The delirium was attributed to the drug, which was discontinued. The pain in the right flank then recurred and the temperature rose and the patient was sent into the surgical ward of a hospital. There, notwithstanding that signs of pleurisy were found at the right base, the appendix was removed. Convalescing from all this the patient was transferred to a medical ward. Here a review of the whole clinical history, the initial delirium (of which pneumonia is probably the commonest cause when an otherwise healthy young man develops it suddenly in association with high fever), the presence of a sterile effusion at the right base, the initial improvement with sulphapyridine, the recrudescence of pain and fever when the drug was abruptly stopped and, finally, the fact that both the appendix and the urine were normal provided good grounds for a belated diagnosis of lobar pneumonia.

A first principle then in the use of the sulphonamides is that it should be based on an adequate clinical diagnosis. In some cases bacteriological confirmation, always desirable, must be waited for. It is far wiser as a rule, even if the patient is acutely ill, to wait for symptoms and signs which will permit of diagnosis and then, if indicated, to use the drug in the full doses allowed for the disease, than to be precipitated into its use on scanty or dubious evidence. It may be given, for instance, immediately after the withdrawal of turbid cerebro-spinal fluid in cases presenting symptoms of meningitis, and before the return of the laboratory report, but it should not be given to every case of bad headache with fever. A second principle in practice again to be emphasised is that the use of these remedies should be strictly reserved for those infections for which its efficacy has been established. In the articles to which these notes are merely introductory a considered statement will be found on the majority of the diseases which can at present be considered as genuine indications for sulphonamide chemotherapy. On some of these revisions of view or method may become necessary.

Much remains to be learned about the precise mode of action of the sulphonamide drugs on bacteria *in vivo* and we need to know more in regard to the optimum time of administration in practice—whether, for instance, before there has been time for the natural development of antibodies or a little later in the disease. This may prove important both in the serious acute fevers like lobar pneumonia and in more local infections such as otitis media and gonococcal urethritis. Research and practice must henceforth proceed in harness and instruct one another. Without the careful researches of men like Leonard Colebrook in this country and of other workers in America the advance of knowledge and correction of error would have been much delayed already. It is the duty of the practising physician or surgeon not to omit the remedy where science and experience have shown it to be indicated and not to abuse it. It is the duty of the research worker to make essential new findings as quickly and readily available to the practising physician as possible. Part of the confusion of thought which always accompanies the introduction of a new remedy can undoubtedly be traced to lack of organisation in the transmission from source to place of application of new and fundamental knowledge. There is a real need for better dissemination of authoritative therapeutic pronouncements from time to time.

The *Gazette* has wisely undertaken for its readers the task of helping to bridge the gap and lessen the lag between a developing science and its skilful and humane employment.

Some Affections of the Eyes in Infancy

By O. G. Morgan, Esq., M.A., M.Ch., F.R.C.S.

THE eyelids of an infant at birth are usually closed fairly tightly and there is a fatty secretion along the margin of the lids which gums the edges together. The swelling of the lids resulting from the considerable pressure exerted on the head also helps to keep them shut. In spite of this, however, infection may occur during the passage of the head through the maternal channel, or immediately afterwards by contamination when the eyes are first opened or, later, by direct infection from the mother's hands or from dressings. The conjunctiva of an infant is particularly vulnerable to infection for several reasons. It is thinner and there is an absence of lymphoid tissue and also there are no tears, and so there is a lack of the natural anti-bacterial lysozime which is so valuable in the adult.

From a public health point of view all cases of conjunctivitis occurring in an infant during the first three weeks of life are notifiable, but a great number of these are mild conditions due to the presence of cell debris or some non-pathogenic organisms.

The organisms which are responsible for the true ophthalmia neonatorum are the gonococci, about 50 per cent., with pneumococci, streptococci, B.C.C. and other organisms making up the other 50 per cent.

The first real reduction in the number of cases of true ophthalmia neonatorum was due to the recognition by isolated practitioners that if the eyelids were carefully wiped when the head was born the risk of infection was greatly lessened. Later Crédé advocated his instillation of a drop of $AgNO_3$ as well, and this reduced the number to a minimum. The method now used is to wipe the eyelids very carefully and instill a drop of 5 per cent. protargol or argyrol or 2 per cent. mercurochrome.

Gonococcal infections usually have an incubation period of about 1–3 days, pneumococcal 5–7 days, and streptococcal 8–14 days; and the first signs are the presence of a watery or slightly purulent discharge. In such a case a swab is taken and the conjunctiva is washed out with lotio hydrarg:oxy:cyanide 1–12,000. The conjunctiva and type of discharge is watched, but particular attention is paid to the wrinkles on the skin of the upper lid. In true ophthalmia neonatorum the upper lid becomes œdematous and the wrinkles flatten out early. If combined with this sign the conjunctiva becomes œdematous and the discharge thick, yellow and tenacious, the condition is a serious one and hospital treatment is necessary to prevent the complications of corneal ulcer and perforation, which have destroyed so many eyes in the past. With modern treatment in the early stages and by skilled nurses, the number of eyes lost has been reduced to a negligible proportion.

At birth it may be noted that there is some congenital abnormality or some condition resulting directly from labour. There may be a coloboma of the eyelids, a dermoid cyst, coloboma of the iris, congenital cataract or microphthalmos—all of which may be noticeable when the eyes are first cleaned. The passage of the fœtal head is associated at first with direct pressure and moulding by the uterus and later, when the head is in the pelvis, with extreme congestion due to pressure on the undelivered body. The head is admirably adapted to cope with the former by reason of the easily separated sutures, the fontanelles and the medullated soft structures within, but in prolonged labour or in cases with contracted pelvis or abnormal presentations, injuries can occur. Ehrenfest and others have shown that 50 per cent. of still-born children show signs of intracranial injury and hæmorrhages, and a large proportion of these show intraocular hæmorrhages. There is a considerable degree of asphyxia in most births and the more marked this is, the greater the tendency to small hæmorrhages. If the eyes of newly-born infants are examined under a midriatic in the first twenty-four hours, multiple small hæmorrhages can be seen in the retina in about 30–40 per cent. of cases, and these are the result of normal labour. This is probably the case with the brain tissue as well. The retinal hæmorrhages disappear very rapidly, and in a few days' time no trace can be found of them. There are no permanent effects on vision unless one happens to have occurred at the macula and then a permanent central scotoma of varying degree may persist. Intraocular hæmorrhages may be more extensive, just as they can be in the brain tissue.

A unilateral proptosis is not uncommon. This is due to orbital hæmorrhage and usually settles down without treatment.

The eyelids may be torn by forceps application and, in fact, in a few rare cases the eye has been completely avulsed. There may be damage to the sympathetic, causing contraction of the palpebral aperture. Damage to the levator will produce a ptosis which may be temporary, but which may never recover completely. The external recti are often injured when it may be noted that there is a convergent squint with faulty abduction in each eye. This condition improves over a period of months or years, but a residual squint is nearly always present which needs treatment in later life. There may be associated paresis of the sixth and seventh nerves on one side which is usually temporary in character.

The cornea may be damaged directly by forceps or by the finger of the surgeon, in which case a haziness will be noticed in the first few days of life. In most cases this traumatic surface œdema fades away and leaves no scar; in some, however, the damage is more serious and there is a split in Decemet's membrane and the endothelial lining of the anterior chamber. A permanent, usually oblique scar is left across the cornea, there is a high degree of astigmatism, but usually, even with correcting glasses, vision is extremely poor.

During the first few months of life the parents may bring their infant and complain that it does not seem to see anything, that the eyes wander in an aimless fashion, and that it does not fix even a bright light. A midriatic must be given and the eyes examined under an anæsthetic. There may be a very poor red reflex due to bilateral congenital cataract or examination of the fundi may show extensive congenital abnormalities or bilateral optic atrophy. In the latter case the Wassermann is usually positive.

Blocked naso-lacrymal duct is very common and it may be unilateral or bilateral. It is seldom noticed until the tears begin to be secreted, and then there is marked lacrymation and the lids become gummed up after sleep. It is often mistaken for a conjunctivitis at first, but its persistence in spite of treatment and the fact that often, on pressing over the lacrymal sac, pus can be squeezed through the puncta usually decide the diagnosis. At least 75 per cent. of the cases ultimately cure themselves with little or no treatment, and if there is no purulent regurgitation from the sac on pressure there is no necessity for any hurry. If, however, there is a purulent secretion which is a constant source of danger to the cornea if it gets abraded, or if the condition has lasted more than six months, it is then best to pass a probe, which almost invariably cures the condition.

In those cases in which the block is only present for a short time it is reasonable to suppose that a plug of cells and debris is responsible; in those others, there is often a definite membranous obstruction which can be detected when the probe passes through it. This operation needs a very gentle touch and it is often better to try syringing instead. If a coloured solution is used and the infant is turned face downwards immediately afterwards, a little dye passing from the nostril shows that the passage has been cleared.

Parents frequently bring their child up thinking it has a squint, and it is important to be able to make up one's mind as to whether the squint is an apparent one or an actual one. The base of the nose is very wide in infants and there is a tendency to slight epicanthus in many of them as well, so that the eyes do not lie in the centre of the palpebral aperture, but nearer the inner canthi. Consequently, if the infant looks slightly to one side, this brings that eye to the centre of the palpebral aperture and the other eye goes further into the corner and gives the impression of a squint. As the child grows the bridge of the nose comes forward and the width between the two inner canthi gets less and consequently, when the child is looking straight ahead, each eye lies in the centre of the palpebral aperture. By observing the corneal reflex, which should lie in the centre of the pupils, and noting that there is no movement of either eye when the light is switched from one to the other, one can also be sure that no actual squint is present. It is important to be certain because a real squint must be treated from the earliest possible moment for two main reasons. In the first place the squint may be due to the fact that the child has begun to lose the sight of the squinting eye because of some changes inside, the most important being a neuro-epithelioma of the retina. Thus all squinters must be given a midriatic, the refraction must be done and a careful view of the fundus, particularly of the squinting eye obtained, an anæsthetic being given if necessary.

The second reason is that if it is a refraction squint, glasses must be given and occlusion of the fixing eye started at once so as to overcome the very powerful desire for suppression. Suppression is necessary because otherwise the child would see double, and it results in a very rapid loss of central visual acuity. With occlusion of the fixing eye for half of every day one can assure that each eye is being used for an equal space of time, and as each eye is being used the corresponding cerebral cortex is stimulated and educated. If an equal visual acuity can be maintained then exercises, or exercises and operation can be employed later and a good visual, binocular and cosmetic result obtained.

Congenital cataract may assume many different forms, but from a practical point of view treatment depends on whether it is extremely dense or only partially obscures vision. In some infants it is apparent at birth that the pupil is white instead of black and that there is a mature cataract. Operation is urgent in these cases because, if it is left, the maculæ are not stimulated and central vision will be extremely poor throughout life; nystagmus will also be present. Unfortunately, this type of opacity is often due to intra uterine inflammation and there is evidence of iritis and cyclitis with iris adhesions and K.P., and the prognosis is very bad with any treatment. Occasionally also it is associated with mental deficiency, though this only becomes apparent as the infant grows. Lamellar or zonular cataract is partial and vision may be only slightly affected. Macular vision is usually developed and treatment depends on the visual acuity with glasses. If it is below $\frac{6}{18}$ it is usually necessary to needle the lens and wash out the cataracrous material some weeks later. Visual acuity after this may be greatly improved.

The etiology of this lamellar opacity is very obscure, but it is probably due to intra uterine malnutrition or malnutrition after birth. When the permanent teeth appear defects are frequently found in the enamel which correspond in date with those found in the lens. The exact nutritional defect is unknown and many experiments on rats have been inconclusive It is possible that the maternal parathyroids may be defective, thus upsetting the calcium metabolism.

Feeding female rats on naphthalene produces a lamellar cataract in the young, and so it is possible that toxic or infective processes in the mother may affect the lens and lead to opacification.

There is a group of congenital cases which have a germinal causation and many family trees which have been worked out over several generations show that lamellar cataract can be an inherited condition.

Sector News

Guy's Letter

C. F. H. wants it to be known that he is not on holiday like "Scrutator," nor has he found the task of writing the Guy's letter too strenuous. The reason why he has to disappoint you this week is that he has been lent to a base hospital, where, amongst toy railways, he is waiting for the moment when he will be allowed to return to us.

Several members of the Junior Staff, both locals and visitors from the country, have been seen in the park looking rather gloomy. It appears that they have received information from the Central War Committee that they will be called up in the near future. Since their services are of great value both to the E.M.S. and to the Medical School, it is hoped that the authorities are successful in their endeavours to keep them in their present employment.

Last week Professor Johnston addressed a meeting of final year students to discuss with them their gievances regarding house appointments.

Residents of our temporary College were surprised a few days ago to find that the lighting in their bedrooms had gone wrong. Those occupying rooms with green walls naturally suspected that some kind person has shown consideration for their eyes, but we are informed that repeated complaints about the black-out have necessitated this drastic lighting restriction.

Despite of notices to the contrary in the daily Press last week the gas practice was purely a Guy's affair, for which a number of celebrities had turned up. We were particularly pleased to see the smile on the face of one of our colleagues who had just returned from an intensive higher gas course and concluded that result of the practice must have been satisfactory. W. G. T.

Orpington Letter

THE darkness always brings a sense of apprehension, a feeling that something may occur out of the ordinary run of things.

One night last week an unconscious figure was carried into the hospital ; his name was whispered but few believed. A closer inspection, however, confirmed the rumours ; the Builder of Balkan Beams had had a spill. We are glad that Mr. Epps is now recovering from his accident and wish him a speedy return to health.

Miss Rawlings, also recovering from a fall, has left us on her journey into the "Wildernesse." May her convalescence be short !

Closely following her went the X-ray table from the Old Block—a sad loss. In its place we have an apparatus which has both the characteristics of a wash-basin and a grain elevator. It is said, however, that this queer machine is a welcome addition to the routine treatment of those who try but fail.

We are very glad to have Hawkins with us again, and hope his stay may be a long one. The consumption of Horlick's on night rounds has already shown an increase over the corresponding period last month.

A dance was held in the Reception Hall on Thursday evening ; we understand a good time was had by all. No doubt this is only a precursor to further revelry of this kind. Alas, once more in Orpington will be heard the strains of negroid music which accompanies that primitive ritual—*O tempora ! o mores !*

G. T. H.

The Wildernesse Letter

THE most recent plastic operation here has been the transfiguration of Mr. Martin into Mr. Middleton. Early in the morning and late at night, with great big waterproof boots on, he may be seen working by the bedside, true to Guy's tradition. His enthusiastic bedside manner has turned the Wildernesse into a centre for occupational therapy, and patients, who were content to watch him in the days when Bermondsey was first growing greens for Guy's, now rush to help him water wurzels for the Wildernesse on the allotment. A month ago he had organised a sewing party to give active finger exercises to some of those with arms in plaster, but it seemed to fade out as soon as all the residents' socks had been darned.

Most rashly we promised a report. Some were surprised at the short hours and the few patients looked after by the American nurses, and thought surely so many did not come so far to do so little for so few ; they, on the other hand, never imagined before that such a crowd of Flossie Nightingales could exist. The ideal would seem to lie in keeping Flossie's efficiency while discarding the long hours and nineteenth century curtailments of liberty. This would give more time for outside interests and help to counter the common criticism of narrowness of outlook.

Holidays have brought changes in the personnel of the hospital. Recently, while Jackson was away, Palmer took his place and enjoyed a week's holiday. Now Mr. Kilpatrick goes on holiday and we look forward to Mr. Spalding coming to take his place.

If music be the food of love, play on ; but if the food of a misogynist, pipe down ! With our hospital musician a malady modified his melody, for he is suffering from fragmentation of the myocardium, and what we hear is but the characteristic murmur of that condition.

D. R. J.

Correspondence

House Appointments

To the Editor of the GAZETTE.

SIR,—May we make use of your columns to bring a matter of considerable importance to the attention of the authorities.

For a long time past the appointment and reappointment of House Officers throughout the Sector has given rise to great and widespread dissatisfaction. We do not know the details of the method of selection of House Officers for any individual appointment. It is known, however, that certain members of the Senior Staff make themselves responsible for deciding the fate of the applicants, many of whom are quite unknown to them.

The selection of House Officers before the War was probably efficient, because in those days, not only did the Senior Staff get to know their clerks and dressers, but also there was certain competition amongst them to secure the best men available for their own firms. That is now no longer the case. Contacts which the students make with the Senior Staff are now few and far between, with the result that, when the time comes for his appointment, any one student may be completely unknown to the selection committee. At present, the people who have the best opportunities for assessing a student's worth are the Registrars, with some of whom all students must come into intimate contact.

We who sign this letter, and all are due to qualify during the course of the coming year, are gravely concerned and are very anxious that in future a fair and logical method of appointing House Officers shall be adopted and that the present apparently haphazard scheme shall be abandoned.

We therefore make the following suggestions :—

1. That appointments shall be made on the recommendation of a Council, which includes all the Registrars in the Sector.
2. That the Council shall have access to the " sign-up " cards of all applicants.
3. That, as far as possible, appointments shall be made to a specified job at a specified Hospital, taking into account the applicants' wishes.
4. That any re-appointment after the standard period of six months shall be made on the recommendation of the Council.
5. That no one shall hold an appointment for more than nine months, if there is anyone available whom the Council consider suitable to replace him.

Yours, etc.,

B. ACKER
C. A. ANDERSON
W. E. S. BAIN
G. S. BARNARD
G. P. BAKER
P. BAXTER
J. F. R. BENTLEY
G. C. B. BLACKMAN
S. BOCKNER
H. A. BUCK
N. F. CLARKE
B. U. COFFEY
P. B. COUNSELL
R. A. CRAIG
D. M. CROOK
M. C. CROSS
W. G. CROSS
G. DHENIN
D. G. DIXON
C. N. EASTES
P. W. EDWARD
P. R. C. EVANS
D. P. FINNEGAN
J. S. FOOTE
M. D. GALLOP
D. GRENE
B. P. GRIFFIN
J. G. GOODHARP
W. J. B. HETT
A. W. HIND
P. W. HOPPER
J. A. IRWIN
E. O. W. JONES
G. C. KENNEDY
H. G. KING
B. KUSTOW
T. L. T. LEWIS
W. J. LEWIS
W. H. LILLYWHITE
M. P. W. LITTLER
G. H. LLOYD
G. W. LUNTZ
J. MAC ARTHUR
G. MAC VICAR
V. H. MARTINDALE
P. B. MAXTED
V. J. MC LEAN
L. R. MC LAREN
H. C. MUKERJI
J. M. MUNDEN
J. R. P. MURLEY
J. B. MUSGROVE
D. S. ORR
H. OSMOND
T. S. PEGUM
G. M. PEARSON
W. H. PETTY
J. PINCHING
D. D. REES
R. J. W. REES
A. RIBEIRO
J. W. RENTON
W. C. SALTER
F. H. STAINES
B. J. STEPHENS
J. W. STEPHENS
S. D. STOCK
G. F. SWANN
M. N. TEUBES
R. N. TICEHURST
J. M. VINE
D. G. VULLIAMY
R. J. WALKER
D. WALTHER
D. M. WHITE
A. E. M. WIGGINS
M. WILKS
J. R. WOOLDRIDGE
D. H. WRIGHT

Guy's Hospital,
London, S.E.

House Appointments

To the Editor of the GAZETTE

SIR,—Through the courtesy of its signatories I have been sent an advance copy of the letter which you print in this issue from the Final Year Medical Students on the subject of House Appointments. Following the receipt of this letter I met the Final Year Students and endeavoured to deal with the subject they had raised. What follows is intended for the benefit of those who were unable to be present on that occasion.

Although the evidence which I have does not tend to corroborate the suggestion that the dissatisfaction has existed for a long time past or is so widespread as the number of signatories might indicate, the important fact is that a certain amount of dissatisfaction does exist at the present time, and that is not a good thing for Guy's. I believe that this dissatisfaction arises, in part at any rate, from incomplete knowledge of the actual facts, as I hope to show.

In peace time recommendations for House Appointments are made to the House Committee by the Medical Committee, and throughout my association with Guy's I have always been very deeply impressed by the amount of trouble which is taken in an endeavour to make certain that the appointments go to the best and most suitable men available. In no institution known to me is the appointment of Junior Officers given so much thought and consideration.

The War, with its disintegrating effect on the Medical School, introduced new difficulties, which were increased by the responsibility which Guy's had undertaken for the Hospitals in Sector 10. Nevertheless, the Medical Committee has endeavoured to continue to carry out its functions with the same sense of fairness and impartiality that it has always shown.

There are no fewer than fifty-four House Appointments for which Guy's is responsible and, of these, about half fall vacant every three months. The number of new applicants available is never sufficient to fill all the vacancies, and reappointments are therefore necessary. When such reappointments are under consideration, confidential reports from all the Medical Superintendents concerned are available and, with these and the applicants' previous records before them, the Medical Committee itself makes the required recommendations.

The list of new applicants is available for comment by the Committee, which hands it on, with these comments, to a Sub-Committee entrusted with the task of putting the applicants into an order of merit and allotting them to their

Hospitals of preference strictly in accordance with that order.

It is quite misleading to suggest that the members of the Sub-Committee " make themselves responsible " for this particular task. They are only acting because they have been requested to do so by the Medical Committee. The members of this Sub-Committee are well aware of the fact that, unfortunately, they have no personal knowledge of many of the applicants, and, to ensure that the appointments are made as fairly as is possible, they have made it a rule that the order of merit should be drawn up solely on the official sign-ups. No other factor is taken into consideration. When it is remembered that each student receives at present between sixteen and twenty signs-up, and that for the Medical, Surgical and Obstetrical appointments each man receives a separate sign-up from the member of the Staff with whom he has worked and from the Registrar concerned, it will be seen that the method of deciding the order of merit is very far from being " haphazard," but is the fairest that can be found in actual practice.

In the light of the above explanation the five suggestions put forward by your correspondents may now be examined.

The first suggestion is a matter for the Medical Committee to decide, and I have promised that it will be brought to their notice.

The second suggestion has been and still is the existing practice.

As regards the third suggestion it is, I fear, in part impracticable. Applicants *are* appointed to a specific Hospital and their individual preferences *are* taken into account in strict accordance with their position on the order of merit. It is, however, for a number of reasons, impracticable to arrange that each man shall be appointed to a specific job. On the other hand, although I believe that the practice is a common one already, steps are being taken to try to ensure that preferences expressed shall be respected whenever circumstances permit.

The fourth suggestion has been the actual procedure all along.

The fifth and last suggestion is, I fear, impracticable, and for this reason. There are a number of junior appointments in the E.M.S. which are restricted to men who have been qualified for not less than eighteen months. These appointments are exceedingly valuable both to the men appointed and to the Hospitals. It is therefore essential that a certain number of House Officers should be retained for the period required. The number is not high and, as the number of vacancies is always greater than the number of new applicants, no hardship is implied for the latter.

I should like to add that, during the " blitz " periods, it was essential to have House Officers available at Hospitals where there was limited experience to be gained during periods of " lull," but, except at his own wish, no man has been retained at such a Hospital for longer than three months. In a surprising number of cases, however, where a man was reluctantly persuaded to undertake one of these jobs, he subsequently asked to be allowed to remain at the same Hospital for a second period.

I agree that it is vitally important to allow the largest possible number of men to obtain the maximum experience in the time available, but it is also vitally important to ensure an efficient Hospital Service for air raid and other casualties. Fortunately, both these conditions are fulfilled by most of the seventeen Hospitals in the Sector for whose House Officers Guy's is responsible.

Lastly, may I say that your correspondents' letter is an excellent example of the average Englishman's sense of fair play, for it is clear that if some men are the victims of unfairness in this particular matter, there must be a corresponding number of men who benefit at their expense. It is therefore gratifying to see that both the prospective " victims " and the prospective " beneficiaries " have signed the letter.

Yours, etc.,

T. B. JOHNSTON,

Superintendent and Group Officer,

Guy's Hospital, Sector X.

S.E.1.

The Innominate Club

To the Editor of the GAZETTE.

SIR,—Members of the Innominate Club and other contemporaries will, I am sure, be glad to read the following note which I have received from George Hankey :—

" Delighted to get your letter and to know that Guy's is carrying on. It is good to hear from friends outside the family circle. One gleans a better view of life at home ; home news is scanty, whereas local news needs thinning out. We three M.O.s are the only officers in this camp for other ranks ; we have a small hospital of fifty beds, but very little work. Thank goodness we have plenty of books ! The men are fit and in good spirits ; thanks to the Red Cross and Y.M.C.A. they have a large library, plenty of games, sports and an orchestra of thirteen different instruments. It is the Red Cross food parcels that put life in us. Best of luck to you all at Guy's. " G. T. H."

Any who would like to write to Hankey should address letters as follows :—

Prisoners of War Post
Kriegsgefangenpost
Lt.-Col. G. T. Hankey, R.A.M.C.,
British Prisoner of War, No. 796,
Camp Stalag XXI B–H,
Germany.

The name and address of the sender should be written on the back of the envelope and no postage is necessary unless sent by Air Mail, which saves several weeks and costs 5d.

Yours, etc.,
R. C. BROCK.

Guy's Hospital,
S.E.1.

Reviews

Diseases of the Digestive System. By E. ROSENTHAL, M.D. Henry Kimpton. 1940. *Price* 42*s*.

THIS interesting book deals with the pathology, diagnosis and treatment of diseases of the digestive system; it is intended for practitioners, but is written more especially for students. The book is of particular interest in that the author is a teacher of distinction in another country, namely, Hungary, and has had very many years of experience in gastroenterology. His teaching is dogmatic and runs at many points counter to our own, but it is representative of a large body of Continental opinion. This book is chiefly remarkable for the introduction of a system of diagrams; these are lavishly presented and are geometric in form; they rely on a contrast of colours for their fixation in memory and purport to perform the function of the mnenonics of our student days, the object being the production of a scientific picture book. There can be no doubt but that these are well prepared and are a valuable aid to memory; they can never, however, replace the bedside observation and clinical instruction upon which our own teaching is based. Their introduction may, perhaps, be indicative of the difference between the Continental system of teaching and our own. On the other hand, if the idea of these diagrams is to stimulate the production by the student of pictures of his own, producing a similar association of ideas, the value cannot be doubted.

With reference to the subject matter of the book, there are five chapters describing the diseases of the œsophagus, stomach and intestinal tract, liver and biliary tract, pancreas and peritoneum. These are well set out with ample X-ray plates and diagrams, the clinical descriptions are accurate and the pathology adequate. On the other hand, many of the opinions expressed are extremely dogmatic. We are fortunate in that at Guy's we receive a very careful clinical training in gastro enterology; there are few pages in this book on which there do not appear statements to which we must take exception or which do not appear incomplete. It is impossible to deal adequately with all these points, but one or two examples must suffice; thus, for example, the fractional test meal is scarcely mentioned, the value of the gastroscope is given very scanty recognition and even the indications for medical and surgical treatment of peptic ulcer are very confused. Perhaps the best criticism is to read it in conjunction with the latest or "Hurst" number of the Guy's Hospital reports: the contrast between the English and the Continental outlook could not be better expressed; it is as odd for us to read of pneumatosis of the stomach as to learn of its dislocation. At the same time there is much of value in this book and, if it is read with a critical outlook, its digestion will provide a valuable intellectual exercise.

N. A. N.

Clinical Electrocardiography. By SCHERF and BOYD. Published by William Heinemann, London. 1940. *Price* 25*s*.

A LARGE number of books written upon the subject of electrocardiography are already in existence. This book has been produced as the companion volume to Diagnosis and Treatment of Cardiovasular Diseases by the same authors; it deals exhaustively with electrocardiography, both clinical and experimental, and more than two hundred tracings are depicted. A large amount of clinical and therapeutic material is introduced and the usefulness and limitations of the electrocardiograph in clinical cardiology are discussed. It is pointed out that the use of the electro-cardiograph, at first restricted to the investigation of the arrythmias, has been of importance in the diagnosis of myocardial involvement in conditions such as diabetes, diptheria and tonsillitis, in the recognition of atypical cases of coronary thrombosis and in the early diagnosis of early coronary arterial disease. Electrocardiographic changes after exercise and their relation to the disturbances of myocardial blood flow are described in detail. The amount of ground covered is very comprehensive; the text is clear and concise and, in addition, there is an ample bibliography at the close of each chapter. This is a really up-to-date book, in best American fashion, and makes attractive and instructive reading.

N. A. N.

Artificial Pneumothorax. By PACKARD, HAYES and BLANCHET. Published by Henry Kimpton. 1940. Pp. 300. *Price* 21*s.*

THIS handbook, written about the practice of artificial pneumothorax in the treatment of pulmonary tuberculosis, represents the contributions of seventeen physicians attached to the Saranac Lake Sanatorium. Commencing with an interesting review of the history of the introduction of this form of therapy, successive chapters describe the physiology of pneumothorax, the technique of the operation and the selection of cases. Accidents during the operation forms a useful and essentially practical chapter, which is followed by an account of the physical signs and a useful essay upon the conduct of treatment. The complications of artificial pneumothorax are considered in great detail, pleurisy, serous effusion, empyema and pleuropulmonary perforation receiving special consideration; the effects upon the opposite lung and upon the cardio-vascular system are also dealt with. The duration and termination of treatment is discussed at great length, and the pathology of the collapsed lung described. The chapter on oleothorax and the encouraging results obtained in certain types of selected cases is of great interest. A realistic review is given of the indications for further thoracic surgery, such as pneumolysis and thoracoplasty in pneumothorax cases, though the operative details of the latter are not discussed. Finally, in perhaps the most important chapter of all, a detailed survey is given of some seven hundred cases with follow ups, so that the end results of treatment can be seen in their true perspective. The correct assessment of such figures is dealt with in detail and comparison made with the results obtained in the pre-pneumothorax era. The indications for pneumothorax in the early stages of disease do not receive the detailed attention that they merit, but the value of selective pneumothorax with collapse and the dangers of partial pneumothorax with no effective collapse of the cavity are adequately stressed. High pressure pneumothorax is frequently mentioned only to be rightly condemned, but a perusal of this book suggests that this dangerous practice still enjoys a considerable vogue in the United States. The reproductions of X-Ray plates are well produced and are plentifully distributed; the book is written by men well experienced in the practice of pneumothorax, and is of value to all who are interested in the treatment of pulmonary tuberculosis.

N. A. N.

Guy's Hospital Gazette

A Journal of Hospital News, Medicine, Surgery and Dentistry.

Published in alternate Saturdays. Price 9d.

Marriage, Birth and Death announcements inserted free.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Hospital Information, etc.

Notice

The Governors have agreed to the trial of a scheme for giving appointments to out-patients. Doctors wishing to refer cases to an Out-patient Department should ring up or instruct the patient to ring up *Hop* 3500 or write to Sister Out-patients, to arrange for an appointment.

The appointments are made according to a " block system "; for instance, appointments for an Out-patient session commencing at 9.30 a.m. would be made for 9.30, 10.30, or 11.30. It is to be understood, of course, that Hospital rules as to financial eligibility still obtain.

P. M. F. BISHOP,
Deputy Superintendent.

Pass List

UNIVERSITY OF LONDON.

THIRD (B.D.S.) EXAMINATION IN DENTAL SURGERY.

July, 1941.

D. M. Cushing
E. Horne
D. G. E. Roberts
A. Ross

SUPPLEMENTARY PASS LIST.

The following Student has passed in Group II:

W. J. Ford

SECOND EXAMINATION IN DENTAL SURGERY.

PART I.

July, 1941.

J. B. Andrew
J. C. Cox
E. A. Glover
A. J. Goodwright
P. C. Grummitt
J. A. Ireland
B. N. Joyce
A. D. Robinson

The following Students are credited with Anatomy and Physiology:

A. C. Campbell
H. S. M. Crabb
N. T. McNeil

PART II.

July, 1941.

D. J. Anderson
T. P. Cheevers
J. R. Halden
G. E. Johns
J. H. H. Knight
P. H. S. Lahaise
T. A. Morris
D. H. Norman
*H. W. Palowkar
B. W. Pett
M. C. Rosen
*C. E. Stuart
A. J. Walters

* Awarded a mark of distinction.

UNIVERSITY OF LONDON.

FIRST EXAMINATION FOR MEDICAL DEGREES.

(*Internal Students.*)

July, 1941.

G. F. Barnes
A. J. Beale
D. M. H. Bickmore
D. G. Breeze
P. E. Brown
P. Coling
D. J. Dennison
A. R. Ellerker
R. H. Goulder
R. W. Hughes
J. B. Kirkwood
C. D. Korn
J. H. Lewis
A. H. Macdonald
C. M. Reuben
J. C. Schofield
R. G. Watson

(*External Students.*)

A. J. Brunnen
J. K. G. Grieves
H. A. R. Loxdale
R. A. Parker
T. N. Reynolds
R. H. N. Long

(*Internal Students.*)

The following Higher School Candidates have completed exemption from the first Medical:

B. D. Grant
I. Macdonald

Papers by Guy's Men

Broster, L. R. A survey of war surgery. *Brit. Med. J.*, 1941, ii, 273.

Worster-Drought, C., and Another. Motor Neurone Degeneration treated with vitamin E. *Lancet*, 1941, ii, 209.

Parfitt, J. B. Presidential Address delivered at the Annual General Meeting of the British Dental Association at Reading University on Friday, August 1st, 1941. *Brit. Dent. J.*, 1941, 71, 127.

Durrans, S. F. Convulsions under Anæsthesia. *Brit. Med. J.*, 1941, ii, 228.

Kark, Robert, and Another. Hypoprothrombinæmia and Avitaminosis-K in Man. *Brit. Med. J.*, 1941, ii, 190

Witts, L. J. Amidopyrine and Pernicious Anæmia. *Ibid.*, 199.

Brook, Ralph. The Assessment of Functional Recovery after War Wounds of the Limbs. *J. Roy. Army Med. Corps*, 1941, 77, 19.

Cameron, H. C. Fifty Years' Progress in Pediatrics. *Clin. J.*, 1941, 70, 200.

Changes of Address

R. W. F. Brotherton, Major R.A.M.C., 52, General Hospital, c/o A.P.O.S.100, W.A. Forces.

W. I. N. Forrest, Surg. Lieut. (D.) R.N. H.M.S. *Caroline* c/o G.P.O.

C. V. Kark, Flight-Lieut, Bicester, Oxon.

R. E. Rix, M.R.C.S., L.D.S., 95, Harley Street, W.1 (Tel.: Welbeck 1896).

F. J. R. Stoneham, Flight-Lieut. R.A.F. (V.R.), R.A.F. Hospital, Wroughton, near Swindon.

Cyril F. Wright, Flight-Lieut. R.A.F., 3, Perry Rise, S.E.23.

R. W. Wheatley Major R.A.M.C. Furze Hill House, North Walsham, Norfolk.

Prisoners of War

Ian McD, G. Stewart, Capt. R.A.M.C., Prisoner of War No. 1434, Stalag XVIII A, Wolfsberg, Deutschland.

Captain Eric H. Cooper, A.D.Corps.

Appointments

Miss M. J. Marriott, Matron Orpington War Hospital.

Miss E. A. Opie, Assistant Matron, c/o Guy's Unit, Pembury.

Miss E. Purcell, Assistant Matron, Guy's Hospital.

Miss M. J. Dornan, Assistant Matron, c/o Guy's Unit, Orpington.

Marriages

DENTON—SANDER-LUER.—On August 15th, in London, Paul Henry Denton, M.D., Flying-Officer, R.A.F. (V.R.), to Edith Sander-Luer.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry

and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV 20*th September* 1941 *Number* 1387

PASSIM

THE introduction into the Out-patient department of the hospital of an appointment system for patients is certainly in theory an admirable step forward. The wastage of time was inherent in the former system, whereby a patient might devote a whole morning or afternoon to sitting on a bench before being seen and examined. Such wastage was very expensive to a class of patient who could very ill afford the loss of wages involved and is even more reprehensible to-day when the maximum man-hour effort is needed throughout the country. As an inevitable result, in too many cases, visit to hospital was postponed until the symptoms had developed to such an extent as to make work impossible, and also the prospects of successful treatment less promising. Others from outlying districts, having once made the effort to arrive in good time would be unwilling to return again after investigation and thus be lost sight of before the results of treatment could be estimated. A further drawback to this system was the establishment of the chronic out-patient, a class who came to live for and around their regular visit to the hospital, and who really enjoyed sitting for hours discussing their ailments with their neighbours. The patience which all patients habitually exhibit whilst awaiting their turn has always been commendable, but this has always been rather an index of their faith in the hospital doctor than in their enjoyment of such enforced leisure. Whether the change will be appreciated by them or not is, however, a more difficult question to answer. For the first few weeks there will inevitably be a few who, told to come back later in the morning, will not bother to return; many others will be unpunctual for their appointments. On the other hand, the readiness with which the Borough has accepted and approved the idea of our country annexe, the "Wildernesse," suggests that changes for the better are less difficult to institute than might be expected. The success of the scheme depends largely upon the co-operation of the general practitioners in arranging appointments for their patients before they send them up to hospital; for the first few weeks also, a great strain will be thrown upon Sister Out-patients and the Administrative staff. The seasonal falling-off in the number of out-patients coincident with the hop-picking season should provide a welcome lull during which the new order may become firmly established before the rush of winter ailments commences. Finally, the point of view of the consultant or registrar must also be considered; teaching and clinical demonstration to the students must control to a large extent their mode of approach to the out-patient session, a fact which is fully appreciated by the patients themselves. It is too early to judge as yet whether the new system will be as convenient as the old one from this point of view.

* * *

THE approach of winter, with the prospect of long nights in the shelters, in atmospheres which are stuffy and close, lends emphasis to the many improvements which have been developed for ensuring the health as well as the safety of the shelterers. In this connection, and also in regard to public health in general, the Central Council for Health Education, a well recognised and reputable organisation has prepared a series of leaflets upon various subjects connected with healthy living. These leaflets are simply written for the general public to read and understand; they deal with the common infections, infestations and fevers, and with certain war-time problems such as water purification, sanitation and shelter life. Stress is laid throughout upon the value of cleanliness, fresh air and sound sleep, upon the early recognition of infections and the early seeking of professional advice and treatment. Such endeavours to persuade the public to become more health-conscious should have a definite influence in diminishing the incidence of many of the common, but often economically important, ailments.

To avoid additional cost of postage it would be appreciated if our Subscribers whose subscriptions became due in March and June of this year would kindly forward same without further application to the Manager, *Gazette* Office, Guy's Hospital.

Obituary

R. WYNNE ROUW, L.R.C.P.(Lond.), M.R.C.S., L.D.S.(Eng.).

ROBERT WYNNE ROUW was a student of the Royal Dental Hospital who obtained his L.D.S. in 1887, when he was appointed as house surgeon in the hospital. On the completion of his term of office he continued his medical course at Guy's Hospital. Here, under the energetic leadership of F. Newland Pedley, the lectures in dental surgery, which had been systematically given since the spring term of 1799, were developing into the Dental School of Guy's Hospital. In 1889 the ability which Wynne Rouw had shown in filling teeth led to his being appointed as an assistant dental surgeon and as tutor in the new School. In 1895, upon the retirement of Mr. Richards, he was appointed to succeed him as lecturer on dental mechanics. In 1904 he followed Mr. Newland Pedley as lecturer in dental surgery. In 1919 he retired from the active staff at Guy's and was appointed as a consulting dental surgeon. Wynne Rouw had a sensitive and retiring personality which resulted in a great care in his appearance and in a slightly pedantic manner of speech. He took great pains as a lecturer, filling the whole length of the blackboard in the old physics theatre with notes in handwriting which was sometimes so small as to be scarcely legible. He was a loyal friend and a successful practitioner. Following a severe operation for duodenal ulcer he retired from practice and spent his later years in his home at Worthing. Here he died, after a long and trying illness, at the age of seventy-eight.

On the Mechanism & Limitations of Sulphanilamide Treatment

By F. A. Knott, M.D., F.R.C.P.

ONE of the most urgent bacteriological questions of the moment is how precisely the sulphanilamide compounds produce their bacteriostatic effect. When the complete answer is known, not only will various uncertainties in their clinical use be removed, but it should then be possible to devise and synthesise compounds specially adapted to attacking particular bacteria, gradually bringing more and more infective conditions under chemotherapeutic control.

It will make more clear the importance of knowing the exact mechanism, which may at first sight seem to be a purely academic point, if one briefly summarises some of the peculiarities of sulphanilamide action. The effect of these compounds on bacteria is obviously much more subtle than that of a simple germicide or a specific protective antiserum.

Whether acting *in vivo* or *in vitro* they show, before even inhibition of bacterial growth is produced, a constant and definite time-lag. Instead of beginning at once to destroy the organisms by coagulation of their protein or other direct attack, they at first exert a slight stimulant effect on their rate of multiplication. In test tube experiments bacteriostasis does not become noticeable until two hours after the organisms first come in contact with the sulphanilamide and sterilisation is not usually complete until the exposure has lasted nearly a day.

Similarly, when virulent organisms are injected along with a protective dose of sulphanilamide into the blood stream of an animal, they multiply for a few hours and the circulating blood does not become sterile until several hours later. Again the lag is noticed and, as it is equally marked whether the drug be given by the mouth or injected prophylactically some time before the bacteria, it cannot be due to delay in absorption of the drug.

If the experiment is varied by making the bacterial injection locally, *e.g.* into the peritoneum, a protective dose of sulphanilamide given prophylactically some hours before will not prevent temporary extension to the blood stream. It is true that the drug ultimately clears the blood stream of organisms and the animal recovers, but the initial lag in its action is again very noticeable and in marked contrast to the course of events in animals artificially protected by antiserum or actively immune owing to previous infection. In them the bacteria remain localised and septicæmia never develops.

Another peculiarity of the sulphanilamides is that they are most effective against young, virulent, actively growing cultures. McIntosh and Whitby[1] who confirmed the majority of these points with regard to pneumococci and sulphapyridine, found that this substance was effective against a highly virulent, " smooth " type I pneumococcus while in the active logarithmic phase of multiplication. But when the organism was repeatedly subcultured until " rough " colonies appeared, the drug completely failed to inhibit it in its new phase.

All these facts suggest that the sulphanilamides interfere with the growth processes of bacteria instead of, as was at first thought, directly destroying them. If that be so, then the point to be determined is how they succeed in breaking the bacterial metabolic chain. There are now many supporters for the theories propounded by Fildes[2], which are—(*a*) that they may interfere with and remove essential metabolites by combining with them or (*b*) that when enzyme action is associated with the presence of a particular metabolite, the sulphamilamide competes with the metabolite for the enzyme and, if successful, blocks the activity of the latter. At present the second suggestion is that most favoured. It accords reasonably well with the fact that these new bacteriostatic substances show, in their spatial formulæ, definite similarities to one or other of the essential metabolites of bacteria against which they are known to be most effective. For example, *p*-aminobenzoic acid acting in conjunction with an enzyme appears to be essential to the growth of *Streptococcus haemolyticus*. Prevent the conjunction and growth ceases. In its formula, sulphanilamide has sufficient spatial similarity to *p*-aminobenzoic acid to compete with it for the enzyme. When, through being present in sufficient concentration sulphanilamide succeeds in monopolising the enzyme, streptococcal multiplication is inhibited. It would seem, therefore, that the key to discovery of new substances likely to be successful in this " competitive inhibition " of bacteria is that they should have certain chemical similarities to known bacterial growth factors. It is already noteworthy that, as Fildes points out, in the case of sulphapyridine and sulphathiazole the bases attached to the sulphanilamide are related to nicotinic acid and vitam B respectively, both of which substances are intimately concerned in normal bacterial metabolism.

A further difference between the sulphanilamides and the older antiseptics is that the former inhibit bacterial division in dilutions so high as to have no appreciable effect on tissue cell division and therefore on healing. The local application of the drugs to wounds, actually or potentially infected, is now proved to be of value, and one of the most striking recent contributions to the subject is that of Hawking[3], who found that application of these compounds, particularly sulphathiazole, to experimental wounds deliberately infected with the organisms of gas-gangrene saved the lives of many of the animals. Moreover, Colebrook and Francis[4] find that sulphonamide, when dusted on to superficial wounds, cannot be observed to exert any appreciable inhibitory effect upon tissue healing, and quite recently Jacoby, Medawar and Willmer[5], testing the toxic effects of the sulphonamides on cells by direct tissue culture methods, find that the concentration required for bacterial inhibition is strikingly lower than that producing any significant cellular inhibition. They comment on the remarkably feeble inhibitory action upon tissue cells of all the sulphanilamides now in common use and go so far as to suggest that we can, for the clinical purposes of direct application to wounds, entirely disregard any action they may have on tissues in favour of their relative specific bactericidal powers: a decided contrast to the position as regards most of the older antiseptics.

The last important point is that organisms inhibited by these drugs die out only slowly—a fact noted in the early *in vitro* experiments and amply confirmed by the rapid recurrence of bacteræmia in experimental animals if the drug is withdrawn too soon. The course of events in animals which recover appears to be that, while bacterial growth remains inhibited, the organisms are more readily removed by the phagocytic clearing mechanism of the reticulo-endothelial system. Fleming[6] claims, in fact, that even in test-tube experiments bacteria seeded into blood containing sulphanilamide will be killed rapidly only if the blood carries living leucocytes. Moreover, he finds this effect enhanced if some specific antiserum be added to the blood. Such considerations make it reasonable to assume that, for the best clinical effects to be obtained with these drugs, the patient's natural clearing mechanisms must be in good order and the better his antibody responses, the greater his chances of rapid recovery. Fortunately the sulphanilamides given, in therapeutic doses to normal people, do not, as a rule, impede either the phagocytic action of cells or normal antibody production. But this is not necessarily true for individuals in whom the drug causes toxic symptoms or in whom the clearing mechanism has been under heavy strain before sulphanilamide treatment is begun. In such cases, however efficient the drug as a bacteriostatic, our attention to the patient's natural defences must never be relaxed.

Always, during sulphanilamide therapy, its peculiarities must be borne in mind. The drug should be exhibited long enough and in sufficient dosage for bacterial multiplication to be held up while the patient's immunity responses develop. If these are sufficiently good, removal of the bacteria then rapidly occurs and the concentrations of the drug in the blood necessary to hold the survivors in check daily becomes less. A logical dosage scheme starts at once with relatively high doses and as soon as bacterial inhibition is achieved and the tendency to bacteræmia, as evidenced by the temperature chart, is controlled, reduces the dose by about 15 per cent. daily. If at any point pyrexia recurs, the concentration of the drug is immediately increased again, followed by subsequent attempts at reduction as opportunity offers.

In the great majority of amenable infections attacking previously healthy people, this procedure will suffice and in this way one will also have minimised the various toxic symptoms. But when first seen the patient may, on clinical evidence, have an obviously severe initial infection and bacteræmia be barely controlled by maximum doses of the drug. Or, early control being achieved, it may be found impossible during an undesirably long period to reduce the dose without immediate recurrence of pyrexia. Moreover, appearance of toxic symptoms may sometimes prevent complete control by the drug alone. Then one has to consider what immuno-therapy has to offer and two lines of approach are possible.

If, for the organism concerned, an efficient anti-serum is available it should be given in really adequate doses. With most anti-sera, particularly those primarily anti-toxic in action, large initial doses are found in all experiments to be more effective and more helpful to the natural clearing mechanisms than the same quantity of serum given in a spaced series of smaller doses. Treatment with the sulphanilamides alone is so frequently successful and the cost of anti-sera is sufficiently high to provoke the present almost universal custom of first trying the effect of the drug by itself But it is really essential to remember that statistical evidence is beginning to show clearly that the average recovery rates from such infections as pneumococcal pneumonia are, both in percentage and rapidity, perceptibly higher when sulphanilamide (to inhibit the organisms) and anti-serum (to assist the clearing mechanisms) are used together from the first. Once this point is generally appreciated, decision as to when the help of anti-serum is necessary may be safely left to clinical judgment. But any tendency to consider the use of anti-sera as having been completely replaced by sulphanilamide therapy is to be deplored on both theoretical and experimental grounds.

A further most effective but often neglected means of stimulating the reticulo-endothelial system is the small transfusion (200 to 250 c.c.) of fresh blood. In only a small percentage of patients receiving sulphanilamide is marked leucopænia seen. In many leucocytosis is well marked from the first and maintained until the infection is disposed of. But instances may be met in which, though bacteræmia is being prevented by relatively low doses of the drug, some local inflammatory focus, such as an area of consolidation in the lung or a streptococcal otitis, is far too long in clearing. In these cases a blood count often reveals the absence of any really effective degree of leucocytosis. Whether this deficiency be ascribed to toxicity of the drug, idiosyncrasy or the low condition of the patient following a severe illness is here beside the point. The patient's clearing mechanism is flagging and must be assisted and stimulated and, particularly as nowadays there are large donor panels everywhere, the small transfusion of fresh blood is an easily available and remarkably effective way of doing so.

Fortunately, only a small minority of sulphanilamide treated cases ever call for blood transfusion or even for large doses of anti-serum; the vast majority require vigorous but only quite ordinary supporting measures. But the possibilities latent in the more direct methods are mentioned the more strongly to emphasise that there are, in the bacteriostatic and the immunological, two distinct and independent factors concerned in the effective use of these drugs. However rapid and specific the bacteriostatic effects of future sulphanilamide derivatives may become, bringing yet more varieties of bacteria under their control, it is unlikely that in clinical work we shall ever be justified in the least neglect of that all-important element in every patient's recovery, namely, the maintained efficiency of his own natural defences. Without them the experimentally most perfect drug may fail.

REFERENCES

1. McIntosh, J., and Whitby, L. E. H. *Lancet*, l, p. 431. 1939.
2. Fildes, P. *Lancet*, l, p. 955. 1940.
3. Hawking, F. *Brit. Med. J.*, 1941, i, 263.
4. Colebrook L., and Francis, A. *Lancet*, 1941, i, 271.
5. Jacoby, F., *et al.* *Brit. Med. J.*, 1941, ii, 149.
6. Fleming, A. *Lancet*, ii, p. 74. 1938.

Thyrotoxic Auricular Fibrillation

A Clinical Lecture by E. G. Slesinger, O.B.E., M.S., F.R.C.S.

GENTLEMEN, — In choosing thyrotoxic auricular fibrillation as the subject of my lecture to-day I have no wish to attempt any encroachment on the province of the cardiologist, whose help and co-operation is so valued by every thyroid surgeon. I want rather to discuss with you some problems of the thyrotoxic heart and its importance in diagnosis, treatment and prognosis, because I believe that importance is not as generally recognised as it should be, because it is a subject not very fully dealt with in many of your text-books.

The four conditions which account for the majority of cases of auricular fibrillation are rheumatic heart disease, myocardial degeneration, hyperpiesia and thyrotoxicosis. Of these four groups the one carrying with it by far the best prognosis, if properly treated, is the thyrotoxic; it therefore becomes of the greatest importance to the patient that this group should be recognised and that proper treatment should be advised and carried out. Failure to do this—and I fear such failure is much commoner than it should be—results in much avoidable invalidism and many preventable deaths.

The first effect of thyrotoxicosis on the heart is, as you know, to produce a tachycardia, and this tachycardia in an untreated case can persist for longer, both by night and by day, than in any other disease. In primary thyrotoxicosis in young people tachycardia may go on for years without the development of any anythmia. In older patients, both in cases of primary thyrotoxicosis and particularly in cases of secondary thyrotoxicosis (which, as you know, tends to occur later than the primary ones) the tachycardia is sooner or later accompanied by arrhythmia, nearly always auricular fibrillation. At first such fibrillation is intermittent, coming on in attacks which last for varying periods, after which normal rhythm is spontaneously resumed. The duration of such attacks varies; it may be a few minutes, a few hours or even a day, but I have noticed a striking tendency for the duration to be a constant one for any particular patient. The patient herself is usually conscious of the alteration in rhythm and experiences great relief when the normal is resumed. Some authors, particularly Crotti, maintain that such attacks of paroxysmal auricular fibrillation may precede the development of any other symptoms of thyrotoxicosis. I feel sure, however, that that is not the case, though in secondary Graves' disease general symptoms of thyrotoxicosis are often but little marked, and there is notorious difficulty in detecting small enlargements of the thyroid, as Joll has repeatedly pointed out. After a varying period of such intermittent attacks of fibrillation there comes a time when they occur with greater frequency and, finally, a state of persistent fibrillation becomes established. Untreated, such cases inevitably lead ultimately to decompensation, congestive failure and death, and although congestive heart failure does sometimes occur in thyrotoxicosis without the previous occurrence of fibrillation, such cases are very exceptional, and the rule is fibrillation first, and failure not until some time later. Now it is a most interesting thing that in thyrotoxicosis we know a very great deal about the clinical facts of the disease, but relatively little about the reasons for them. That applies as much to the cardiac manifestations as to any of the other symptoms or signs. There are several theories as to why the heart behaves as it does, and though some of them have much to support them, none is altogether convincing. Firstly, there is the view that muscle fatigue is the primary factor; that the heart muscle, itself burdened with an increased metabolic rate, fails under the continued strain of over-action, and that this failure is accelerated by the depletion of the glycogen reserve of the heart. The next view, and the one that seems most generally adopted in this country is that thyroxin exerts a direct toxic action on the heart muscle. This view, while attractive in its simplicity, really has very little actual evidence to support it. Means, Sittler and others believe that the effect of thyrotoxicosis is comparable to that of a catalytic agent and hold that thyrotoxicosis brings to the surface latent cardiovascular lesions which resume their latency when the thyrotoxicosis is terminated. They specify rheumatic heart disease, hypertension and arteriosclerosis as the common latent conditions, and believe that the perfectly normal heart does not develop fibrillation or failure as the result of thyrotoxicosis. This view is difficult to combat because the proof of normality is always hard, but it seems to me that the after-history of cases whose fibrillation or failure has responded to thyroidectomy disproves it, because sooner or later the alleged latent cardiovascular lesion should become patent, or, in other words, these cases should invariably relapse in time, which, in fact, they do not. Another view much held at one time was the so-called "shunt" theory. This compared the highly vascular thyroid to an arteriovenous aneurysm and attributed the heart failure to the shunt produced in the circulation. The fact that both fibrillation and failure not infrequently occur with small nodular goitres of no great vascularity is, however, enough to disprove this. Another suggestion which has recently been made is that the cardiac damage may be due, at any rate in part, to avitaminosis of vitamin B occasioned by the high metabolic rate without compensatory increase of food intake, a condition similar, in fact, to the cardiac changes occurring in beri-beri. Against that, however, is the fact that it is by no means the cases with the highest metabolic rates or the poorest appetites who show cardiac changes; quite the contrary in fact, in that primary thyrotoxicosis in a young woman with a B.M.R. up to +80 per cent. or +100 per cent. is seldom accompanied by cardiac arrhythmia or failure.

I think, therefore, that we can say that while we know what cardiac changes do occur and a good deal about when they occur, the reason why they occur is still a field for speculation and research.

One fact is, however, clearly of ætiological importance, and that is the age of the patient. The older the patient the more readily does fibrillation occur, and it is probably the age factor alone which accounts for the greater incidence in secondary than in primary thyrotoxicosis. This, I think, lends considerable support to the fatigue theory, since it is unlikely that cardiac muscle is an exception to the rule that fatigue is more easily produced in old than in young tissues.

If we now turn to the question of diagnosis it might at first sight appear that there could be but little room for mistakes. As regards the question of the fact of fibrillation this is fairly true, but it is in the composite diagnosis of thyrotoxic fibrillation that the many pitfalls arise. In regard to the fibrillation itself the only confusion likely to arise is with extra systoles, because in a rapidly acting heart it is quite impossible to differentiate extrasystoles from fibrillation by auscultation alone. The usual method of getting rid of the extrasystoles by increasing the rate by exercise is inapplicable to these cases, and it requires an electrocardiogram to make the differentiation. Flutter rarely occurs, though it may do so in the occasional case where a post-operative hyperthyroid crisis occurs in a previously fibrillating patient, and, if it does occur, it carries with it a very grave prognosis.

If we now consider the situation where the existence of fibrillation, either intermittent or continuous, is recognised, the question which faces us is the diagnosis of its thyrotoxic origin. As I have mentioned before some American surgeons hold the view that the cases of paroxysmal auricular fibrillation which occur sometimes, particularly in men, with no demonstrable cause, either cardiac, hyperpietic or thyrotoxic, are, in reality, prethyrotoxic in origin. Personally I feel sure that that is not true. Professor Ryle tells me he has followed several such cases for many years without their developing any thyrotoxic symptoms. When the fibrillation occurs in a case of full-blown primary Graves' disease, the diagnosis is never in doubt, although such patients may have a relatively high blood pressure. You will usually find that these patients began their Graves' disease at a later age than usual, and the fact that it is relatively commoner in men with primary Graves' disease is, I think, solely due to the fact that the average age of onset of primary thyrotoxicosis in men is considerably higher than in women. The chief source of mistakes occurs in secondary thyrotoxicosis. As you know, in this condition a goitre, usually nodular, not necessarily large and sometimes retrosternal or even intrathoracic has existed for many years before the onset of toxic symptoms. It may have passed unnoticed by patient and doctor alike, or more probably the patient, knowing of its presence, has been assured at some time that it is of no significance and has dismissed it from his mind as a potential source of trouble. When such a patient, particularly a man, begins to fibrillate, there is considerable risk of the origin of his fibrillation being overlooked. Either the goitre is not noticed, and the fibrillation is considered to be degenerative or hyperpietic in origin, or the goitre is known to exist but is not considered the causative factor because of the absence or, at any rate, the minimal development of other evidences of thyrotoxicosis. In such cases a basal metabolic rate estimation is invaluable, though it must be remembered that in secondary thyrotoxicosis high readings are not found, and that, on the other hand, any form of cardiac failure usually shows a rise of 10 to 15 per cent. in the B.M.R., due possibly to the stimulation of tissue asphyxia.

Treatment.—It cannot be too strongly insisted on that the most urgent single indication for surgical treatment in thyrotoxicosis is auricular fibrillation. Whatever views are held about the place of X-rays in the general treatment of thyrotoxicosis, it holds no place here, and medical treatment is equally unavailing in itself though of the greatest value in the preparation and management of the case, particularly if any degree of failure already exists. It is, unfortunately, a commonplace for both patient and medical attendant to put forward the view that while no doubt surgical treatment is desirable, the state of the patient's heart will not permit of its use. That is about as logical as saying that one must not use the highway for an essential journey because of the annual toll of road accidents. By all means let us take every measure to minimise the hazards of the journey, but there is no other means of reaching ultimate safety. Operation having been decided on, the three stages in the management of the case, pre-operative preparation, the operation and the after-treatment are of equal importance, and failure in any one of them equally jeopardises the success of the whole undertaking.

Pre-operative care.—If any degree of actual cardiac failure is present the co-operation of a cardiologist should be sought, and the maximum degree of compensation awaited before operating. In cases with fibrillation without failure a period of two to three weeks is usually enough for preparation. It is very seldom possible to restore normal rhythm before operation either by means of digitalis or quinidine, and, personally, I no longer attempt it. On the other hand, a rapid fibrillation can and should be slowed by digitalis, though the large doses sometimes advocated seem to me neither necessary or desirable. I usually start the patient on one red granule of Nativel's digitalin (gr. 1:600) three times a day, and reduce that to two and then to one as the fibrillation slows. There is, of course, no particular virtue in digitalin as opposed to other digitalis preparations in equivalent dose, but it is what I happen to use. If the patient is fibrillating at a slow rate I think it is probably wise to withhold digitalis altogether. Sedative treatment is most important, and luminal in $\frac{1}{2}$-gr. doses once or twice a day is most satisfactory. If the case is one of primary thyrotoxicosis, the usual iodine preparation is given, but in the more usual cases of secondary thyrotoxicosis I never give iodine. It does no good and sometimes, I think, does harm. Rest in bed, a high carbohydrate diet, and plenty of glucose, even if some glycosuria results, are all important, and every effort must be made to reassure the patient and to gain and hold her complete confidence.

As regards the actual operation itself the same general considerations hold as for thyroid operations in general, of which I think light anæsthesia, good exposure, minimal blood loss and gentle handling are the most important. In primary cases at least seven-eighths of the total gland substance must be removed, and in secondary ones a generous thyroidectomy should be done rather than a mere removal of the nodular goitre. It not infrequently happens that thyrotoxic patients who were not fibrillating before operation do so during its course or shortly after, often unnecessarily alarming an inexperienced anæsthetist. Such cases, in my experience, invariably revert to normal rhythm by themselves and require no treatment.

In regard to the post-operative care of patients operated on for fibrillation, the usual routine is followed, that is to say, adequate morphia, cooling and, in the primary cases, Lugol's solution. In addition, if they were receiving pre-operative digitalin it is continued. Some cases, though not many where the fibrillation has been long established, resume normal rhythm by themselves. Personally I allow seven days for this to happen. If it does not digitalis is stopped and quinidine treatment is begun. I feel quite sure that quinidine is neither used often enough in these cases nor in adequate dosage. That may account for the fact that some thyroid clinics report resumption of normal rhythm in only a proportion of cases. So far I have not had a single case in which normal rhythm was not restored. On Dr. Campbell's advice I give quinidine in the form of an increasing course :—On the first day, 5 grs. at 6 a.m. ; on the second day, 5 grs. at 6 a.m. and at 8 a.m. ; and on the third day, 5 grs. at 6 a.m., 8 a.m. and 10 a.m. ; and so on, increasing by one two-hourly dose daily until the sixth day, when 30 grs. in all are taken. A high proportion of patients resume normal rhythm towards the end of the course. If they do not, after a three-day interval the course is repeated and, on two occasions only, a third course has been necessary. When normal rhythm is established a maintenance dose of 5 grs. twice daily is continued for a few weeks, and after that the patient is advised to resume the dose on noting any pulse irregularity.

In regard to prognosis, I think we should look at it before, during and after operation. Before operation thyrotoxic fibrillation carries a bad prognosis, in that, sooner or later, congestive failure is bound to occur.

From the operative point of view the mortality is definitely higher than in non fibrillating cases, though but little so, and I think mainly in the cases where the patient is over sixty, stout and has an associated hyperpiesia. The post-operative prognosis is good. Nevertheless, it not infrequently happens that if such patients overtire themselves or develop an infection such as influenza, fibrillation recurs, but it can usually be readily controlled by quinidine.

In spite of the fact, however, that thyrotoxic fibrillation responds so satisfactorily to surgery, I think we should do well to remember that in most cases it should never be allowed to occur. The primary case should have been operated on long before, and the majority of nodular goitres are far better removed before the lapse of the ten to fifteen years before which they are seldom responsible for fibrillation.

Sector News

Guy's Letter

We were pleased to have Walter Gilford with us last week. He was brought here with the aid of several despatch riders and did Noel Glover's work while he was ill.

The present lull has caused one of our surgeons to start a war of his own. He has made up his mind to drive the staphylococcus out of the Borough and to surround his patients with strong defences. Without giving valuable information to the enemy it can be mentioned that he proposes to open his campaign by sterilising the ward radiators.

Miss Purcell, in her new black frock, was much admired in the Park. We congratulate her on her appointment. We have not yet seen Princess Ademola in her " blue," but since her appointment was made by the *Daily Telegraph* and not the Matron, it may not be official.

During past weeks, the visitor to Guy's was greeted again by Thomas Guy as in pre-war days. Some days ago, however, some men came along and erected brick walls around our old friend, and it looks as if we shall not see him again until the end of the war.

And there is light again in the house of Nuff.

P.S.—We must apologise for erroneously stating in our last latter that Clifford Hawkins is spending his time playing with toy trains. In fact, he is employed by the Orpington (Guy's, K.C.C. & E.M.S.) Joint Model Railway Co. as temporary ticket collector.

W. G. T.

Pembury Letter

The hop-picking season has come round once again and with it the inevitable increase in the work here—welcome after a summer of comparative slackness. Both medical and surgical wards have had their quota of " hoppers," while the receiving ward has had more than its share of " creepy-crawlies," and the staff there are getting unlimited experience in wielding the fine-toothed comb.

The added responsibilities heaped upon the Medical Superintendent since the change in the administration of the hospital has necessitated his taking up residence within its precincts. He is now installed in the late Master's house, and we are glad to welcome him and Mrs. Grasby, and all the little Grasbys, amongst us. We are sorry however, that the close proximity of the family dining-room no longer makes it necessary for him to take any meals with the Medical Officers. They will both miss his company and also the chance that was afforded of a prolonged close-formation attack upon him with suggestions for the welfare of the hospital and especially of the Medical Officers.

In furtherance of the War Savings Campaign of which, thanks to energetic leadership, Pembury has an active group, a tennis tournament is at present in progress, in which both hospital and village are eagerly partaking. Tracking down of opponents and arranging a time and a place which are suitable to the players and to Jupiter Pluvius has often exercised more skill than the resulting exhibition seemed to justify. But these extra court manœuvres have only added to the interest of the tournament of which the finals will shortly be ready to be played.

The diagnostic ability of one of our shrewd hortiphysicians has been shown in an interesting case recently reported. The patient was a young hermaphrodyte of some four months growing, who was found one morning in a state of collapse. On examination nothing could be found to account for the condition, but a review of the history revealed that an anxious foster-parent had recently administered a tonic containing phosphoric acid to his luckless offspring (the prescription was obtained at a chemist's and is not found in the Guy's Pharmacopœia, so he deserves no sympathy), and a provisional diagnosis of acidosis was made. Alkalies were therefore administered in osmendous doses and resulted in a rapid and permanent cure. So home-grown tomatoes may yet feature on the menu of this lucky home.

G. L. L. R.

Farnborough Letter

There has been a good deal of coming and going among the surgical staff during the past fortnight, though it appears now that some stability has been re-established. Shortly after the transfer of Mr. Gilford, Mr. Spalding received instructions to go to the " Wildernesse " to release Mr. Kilpatrick for a holiday, and Mr. Davis came down here from Guy's. Shortly after the arrival of Mr. Davis, Mr. Rushforth (whom we had been resigned to losing at the end of the month) went off somewhat precipitately for Dartford. However, Mr. Spalding has now returned from the lap of luxury and the housemen have been brought up to strength by the arrival of Mr. MacLaren, whom we welcome as a student

House Officer. The medical side has so far remained strictly " put."

The following singular occurrence was witnessed from a ward window by a patient, who recounted it with a somewhat pained expression. One morning a stretch of brand new fencing was erected to replace a hedge which had, prior to the arrival of a bomb, separated the Hospital from the garden of " Summerlands," now used by the Medical School. By the evening of the same day an improvised stile had appeared which facilitated climbing over the fence, but, by the following morning a hiatus had appeared in the fence just at the point where it crossed the path beaten out by the feet of those passing to and from lectures. The patient, incidentally, had had a laparotomy and laughter was a painful process.

V. C.

Orpington Letter

NEVER let it be said that those at Orpington were wanting for new ideas. The latest development in the desire for the grotesque is the physical training class for doctors, or how to become a super man in six lessons. Led by our ecclesiastical friend, these embrionic Nietsches climb up the hill in the mists of morning to do their daily dozen on the hockey field. How long this triumph of mind over matter will continue it will be interesting to observe!

The Mess has been under constant attack this week from the common house fly. After having had food and provisions contaminated it was decided that counter operations should begin. Gill was charged with this duty and success came at once, three hundred being stuck in flight and a further twenty-five destroyed on the ground. The reason for this mass raid is due to the debris which has been collecting around the dustbins. Apparently the rate of emptying of these containers is inversely proportional to the speed with which they are filled.

We were surprised and not a little hurt to read that our colleague at Guy's should describe our model railway as a toy. Really, sir! May we cordially invite you to Orpington so that this error may be corrected? Furthermore, let the rumour be denied that dolls' houses have been seen in the Nurses' Home.

The Orthopædic Department have been presented with a very fine bundle from America in the shape of a Horley table. This ingenious apparatus enables plaster to be applied in any position desired and, judging from the photographs in the accompanying booklet, there will never be a dull moment in the theatre of Thomas Guy. Is it too much to hope that Orpington may also possess an operating table and lamp for ordinary surgical procedures?

The month of September brings with it the threat of impending Final State and Preliminary examinations. This accounts for the large tomes which each nurse carries with her these days. We wish them all good luck in their academic trials.

G. T. H.

Southern Letter

IT must be confessed that meal-time conversation is an unknown art in the Southern Mess.

Up to the present it has been almost entirely confined to what is usually called " shop." Unhappily, however, our attention is being forced, more and more, upon the food itself, which is now so unpleasant as to rank as Topic No. 1.

We are fully aware that a war is in progress; that things are difficult; that Staff is depleted and that we are rationed; but we have seen enough of food elsewhere to know that it is quite possible both to obtain fish that does not stink and to serve all food in a palatable condition—not in the desiccated, unsavoury and badly cooked state in which it arrives on the table.

We do not expect miracles, but we do expect consideration; and we feel that an improvement is a reasonable request, well within the powers of those responsible.

The surgical musical chairs recently played in the Sector has now stopped. We have done rather well out of it, for it was Mr. Rushforth who was without a chair when the music stopped, with the result that he is now sharing the Southern seat with Mr. Gilford, waiting for the music to start again.

Anyone who has been educated in the Guy's district must be familiar with the common flea in reasonable numbers, but how many can boast of a collection reaching three figures in one place? Such a remarkable phenomenon is worthy of record. This plague, which must be comparable to those sent to encompass Pharaoh, broke out in one of the hospital buildings almost overnight. Attempted attacks with domestic fumigation have only stimulated the monsters to further reproductive efforts. However, the machinery of the L.C.C. has been put in motion and we are eagerly awaiting a specialist from the Department for the Destruction of Insect Pests complete with up-to-date blitzkrieg apparatus from County Hall.

Meanwhile strategic withdrawal is our only safeguard.

H. P. G.

Correspondence and Hospital Information, etc.

The Ladies' Guild of the Royal Medical Benevolent Fund

To the Editor of the GAZETTE

SIR,—Before the War the Ladies' Guild of the Royal Medical Benevolent Fund relied, not in vain, upon the willing help of many wives and daughters of medical men both in London and the provinces. In the upheavals of to-day so many hospitals have been moved, so many honorary staffs have gone with them, and so many of the latter's womenfolk have moved too, that the Guild has great difficulty in maintaining contact with its old friends and supporters. Greatly as the War has increased the problems of the main medical charities, those of the Guild have been even more sharply accentuated.

It is in the hope that through your columns, Sir, this letter may reach some of our old friends whose whereabouts we do not know, and that it may secure us some new friends as well, that I ask you of your goodness to publish this appeal for help.

It is not only money that we lack, though that is our greatest need, but clothes for men, women and schoolchildren are in great demand and will be gratefully received at our headquarters where, despite blitz scars, we are carrying on our work of supplementing that of the R.M.B. Fund by sending help to the widows and children of medical men. This help consists not merely of grants to the elderly and infirm and assistance with school fees and training for boys and girls, but includes many extras such as the provision of coal for the winter, invalid comforts for the sick as well as personal service and advice to our beneficiaries.

Subscriptions and gifts sent to Tavistock House (N), Tavistock Square, London, W.C. 1, will be gratefully acknowledged.

Yours, etc.,
HILDA M. WOODWARK,
Chairman of Council,
Ladies' Guild of the Royal Medical
Benevolent Fund.

Notices

CALDECOTE HALL, NUNEATON, the well-known institution for the treatment of neurasthenia and addictions, was taken over by the Ministry of Health last year, but was later relinquished and has now resumed its normal functions under the care of its Medical Director.

GUY'S HOSPITAL MEDICAL SCHOOL.

The following awards have been made :—

Treasurer's Medal and Prize in Clinical Medicine.
P. Fourman.

Treasurer's Medal and Prize in Clinical Surgery.
H. A. Ripman ; R. A. Craig (certificate).

Beaney Prize in Pathology.
G. P. Baker.

Pass List

SOCIETY OF APOTHECARIES OF LONDON.
FINAL EXAMINATION.
August, 1941.

Surgery.
H. G. King.

Medicine, Pathology and Forensic Medicine.
*D. M. Mayman.

Midwifery.
T. W. Renton.

* Has completed the examination.

UNIVERSITY OF LONDON.
M.D. EXAMINATION.
July, 1941.

Branch V (Hygiene).
Samuel Leff.

Changes of Address

K. Black, Squadron-Leader R.A.F. (V.R.), The East India's Sports Club, S.W. 1.

P. S. Clarke, Lieut. I.M.S., c/o Messrs. Grindlay & Co., London, S.W. 1.

R. T. Hinde Lieut. I.M.S. c/o Messrs. Grindlay & Co., London, S.W. 1.

C. S. Pitt, Captain R.A.M.C., 198th Field Ambulance, c/o A.P.O.

J. W. Small, Captain A.D. Corps, c/o Army P.O. 400.

D. Stafford-Clark, Squadron-Leader R.A.F., Mess, Waterbeach, Cambs.

Addresses of Prisoners of War

O. Ive, Lieut. R.A.M.C., Camps Concentramento P.G., Rezzanello, Piacenza, Italy.

Births

WALLACE.—On September 8th, 1941, at 70, Alexandra Road, Epsom, to Maureen (nèe Robarts), wife of Flight-Lieut. L. J. Wallace, R.A.F. (V.R.)—a son.

MAYMAN.—On September 7th, 1941, at Dewsbury, to Vivienne, wife of Denis W. Mayman—a daughter.

Marriages

TILL — CRUST. — On August 9th, 1941, at St. Gregory's, Sudbury, Major Stanley Jameson Till, M.C. Royal Signals, to Margaret Emily Crust.

Death

ROUW.—On August 29th, 1941, at Worthing, R. Wynne Rouw, M.R.C.S., L.R.C.P., beloved husband of B. Wynne Rouw.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *4th October* 1941 *Number* 1388

PASSIM

NOTWITHSTANDING the close guarding of all kinds of information from the enemy, there seems to be much more latitude for the dissemination of medical knowledge during war-time than might be expected. Medical students must be trained and practising physicians and surgeons must be kept abreast of recent advances in their respective fields; accordingly the various journals are able to print their original contributions practically free from censorship and the publishers continue to bring out new and re-editions in well-compiled volumes.

This issue of the *Gazette* is a special number devoted to reviews of the latest books which have appeared or shortly will appear before the medical public. In every case the publishers are to be congratulated on their ability to overcome the shortage of labour and materials and so to carry on with their worthy war-time job.

* * *

THE appointment of a special committee to assist Russia in medical affairs comes as welcome news to us all. It is a noble gesture which our ally appreciates very much as manifested by an enthusiastic announcement to that effect from the Moscow wireless station. However, one cannot help feeling that our medical aid to the Russians ought to be more concrete and extensive. Presumably, because of the scarcity of our own medical personnel, it will not be possible to send a large body of doctors to the Eastern front; on the other hand, information such as would be obtained by a small group of volunteer doctors working among the Russians, cannot be over-estimated in guiding the policy and material aid which this special committee will be expected to recommend. If the formation of such a group is thought justifiable by the authorities, what could be more appropriate than recruiting it from among the men who have dealt with so many of Britain's casualties and have working experience in her hospitals on the present emergency basis?

* * *

A NEW diagnostic method in medicine has recently made its appearance in this country. Essentially it is an inexpensive method of mass chest radiography employing miniature photography for the purpose. Using " 35 m.m." film, permanent X-ray records of the chests of thousands of recruits may be obtained in a comparatively short space of time; each negative is then projected on a screen, and if doubtful shadows are present, the prospective patient is re-X-rayed, using an ordinary full-sized plate. There are several advantages to this system and there can be little doubt that it will occupy a permanent place among the already formidable list of special investigations. To begin with, it is economical and once the apparatus is installed the time consumed per X-ray picture is almost insignificant. When confronted with large numbers of apparently fit men it is not easy to elicit all the possible constitutional symptoms and physical signs of disease, particularly when they may verge on the edge of normality, as is often the case in pulmonary tuberculosis; however, by utilising this new kind of radiography such a source of error may be covered by reading apparent " suspicious " areas on the X-ray film. Thus, it is hoped that many cases of open tubercle, which otherwise might not have manifested themselves, will be discovered and that early or suspicious cases will be brought to light; this will result in the patients themselves receiving adequate treatment and, at the same time, save the country much expense in useless training of recruits and subsequent compensation.

On the surface this would appear very satisfactory, but there is one outstanding pitfall which one meets with in practice. Special investigations have always been an accessory source of information which the clinician called in to supplement and reinforce his already formed opinions. There is an ever-growing tendency for these laboratory methods to get out of harness, and now the time has come when the cart has been put before the horse so that the physician must obey the implications of X-ray abnormalities probably before he has even seen the patient. The result of this is that many healthy energetic young men are being sent to hospital and, after a period of sometimes months, during which further investigations are performed, they are sent before a board who judge their fitness for the Forces. The whole picture is an unwholesome one which involves the needless wastage of man-power and at the same time may cast an unjustifiable blemish on the affected individual's future. One must accept miniature radiography as a definite advance in clinical methods but more consideration must be devoted to its proper application if abuse is to be avoided.

* * *

UNFORTUNATELY, owing to wartime restrictions of space, it is not possible for the *Gazette* to welcome the new students and to greet the old with that same spate of good advice from our elders as in the past. In this issue, however, a short description is given of the present disposition of students throughout the Sector, and some worthy advice to those commencing their clinical work, to the dental students and to the nurses.

* * *

A Sherwood Park letter appears in the *Gazette* for the first time, and in lieu of a general welcome to the younger students, in the next issue of the *Gazette*, a special full account of all the activities of the Clubs' Union and student societies will be published.

An Appreciation

ROBERT WYNNE ROUW, L.R.C.P.(Lond.), M.R.C.S., L.D.S.(Eng.).

THE death of Wynne Rouw has severed yet another link between the early days of the Dental School and the present time. To many of the younger generation Wynne Rouw is but a name rendered familiar by its application regarding Guy's to a solution for the treatment of the gums introduced by him from America. But to others of an older generation he meant far more than this. Affectionately known as "Winnie" he was one of the earliest members of the Staff who, through their spade-work in the early years, made possible the School as we see it to-day—the largest and one of the most famous in the British Empire.

Quiet and unobtrusive in manner, he possessed a marked subtlety of humour, and the writer cherishes to this day happy memories of a journey from the North of England over a pleasant dinner garnished with a fund of anecdotes and witty sayings.

Wynne Rouw was an excellent teacher, and into his teaching he imparted a vast amount of commonsense. Although somewhat verbose in his style of speech this commonsense was always apparent even to the most junior student.

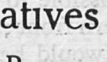
"Winnie" possessed—what the world lacks so much and so sadly to-day—a profound sense of dignity. Always well-dressed, he might at any minute have stepped out of a band-box, and the writer can see him now walking down Wimpole Street faultlessly attired in frock-coat with silk hat fixed at that slightly rakish angle men of his generation can so well remember. One always felt better for meeting him and now that he has gone and only memory remains that memory will always bring back to one the recollection of a perfect gentleman—in every sense of the word.

F. B. B.

Sulphonamide Derivatives

By N. Mutch, M.D., F.R.C.P.

PHARMACOLOGY.

SULPHANILAMIDE was first synthesised in 1908 and the sulphonamide dyes in the following year. The bacteriological work of succeeding decades did not lead to any therapeutic discoveries until 1935, when Domagk[1] showed that one of the dyes, prontosil (red), would control streptococcal infections in mice. It was soon found that sulphanilamide itself had a similar action (NH_2SO_2NH_2). Simplification of the chemical issue was only the prelude to further complexities until to-day some thousands of related compounds have been prepared and investigated, the objective in view being the discovery of a derivative with the following desirable qualities :

1. Free solubility in water and neutrality of the solution so formed.
2. Diminished toxicity.
3. Higher potency.
4. Range of action over a greater number of bacteria.
5. Excretion in a freely soluble form.

So far the attempts have met with little success. Sulphapyridine sodium is, indeed, soluble in water, but this advantage is almost completely offset by the destructive alkalinity of the solution which is reported to be approximately equivalent to that of a decinormal solution of caustic soda. It provokes alarming local reactions if injected subcutaneously or into the muscles, and may produce permanent degenerative changes in the cauda equina if injected intrathecally. Sulphanilamide itself continues to be the drug of election for common use with sulphapyridine in selected cases.

FATE.

Sulphanilamide, in spite of its insolubility in water, is absorbed moderately well from the small intestine. Provided that the dose is not excessive and that the patient is not too gravely ill most of the drug reaches the blood within three or four hours. Circulating, it finds its way into all tissues, secretions and exudates, but the concentration in the cerebrospinal fluid is always somewhat lower than that in the blood. A large proportion is acetylated in the liver and loses its therapeutic properties. Unfortunately the acetylated derivative is still toxic to the host and on excretion into the urine is so insoluble that frequently it separates as crystals which may give rise to hæmaturia, obstructive anuria and calculi. The acetylated form of sulphapyridine is more insoluble still and the risk of urinary complications proportionately greater.[2] In each case considerable amounts of drug are excreted unchanged and elimination is complete in about twenty-four hours.

The therapeutic effects are not obtained by administering a given amount of sulphanilamide but by maintaining a certain concentration (about 10 mg. per 100 cc.) of this substance in the blood. It is usually assumed that the relative rates of absorption, acetylation and excretion are balanced to give a steady plateau of sulphanilamide concentration in the blood when successive doses are administered by mouth at intervals of four hours. This rule is a very rough-and-ready one and actual observation shows that widely differing results are secured in different individuals. Even when the dose per kilo of body weight and its spacing are constant, the concentration registered in the blood may vary from 2 to 14 mg. per 100 cc.

CHEMO-THERAPEUTIC ACTION.

The strictly pharmacological properties of these drugs are toxic ones, the beneficent actions are only perceptible in animals or patients infected with bacteria. The therapeutic effect consists in sterilisation of certain infected tissues and abatement of the clinical manifestations of the corresponding diseases. Although the mode of action is still obscure many important facts are known. The action is a local one of sulphanilamide itself on the infected area. Infected wounds packed with sulphanilamide are quickly freed from hæmolytic streptococci. A certain amount of absorption occurs and sulphanilamide appears in the blood. If the local application is omitted but the concentration of sulphanilamide in the blood which would have followed such treatment is secured by administration of the drug by mouth, the expected clinical benefit is not so obvious. It is also significant that much of the drug always passes through the body unchanged and that the fraction which is modified is inert. McIntosh and Whitby[3], working on pneumococcal infections, showed conconclusively that the sulphonamide drugs do not cause leucocytosis or stimulate the phagocytic activity of leucocytes, that they do not increase the speed of production of specific humoral immune bodies or improve their quality or lead to their production in greater amounts. The drugs themselves are very feeble germicides when compared with antiseptics in common use and the problem cannot be solved by the simple statement that sulphanilamide is a bacteriostatic substance which inhibits the growth and multiplication of bacteria. Metaphen, proflavine and countless other compounds are far more powerfully bacteriostatic than sulphanilamide (Mackay[4]), but cannot produce its characteristic response in infected animals. Current opinion inclines to the view that the distinctive feature of the bacteriostatic action of sulphanilamide is that it is operative in the *living* tissues of the host. It should be sufficient to deprive invading bacteria of their power of drawing sustenance from living tissues. If reduced in this way to dependence on a saprophytic mode of life they could neither multiply nor continue to live for any great time inside the body. The clinical manifestations of the infected state would cease. As a hypothesis it can be assumed either that the sulphanilamide inactivates some bacterial enzyme essential to bacterial metabolism or so modifies the chemistry of the fluids and tissues of the host as to render them unsuitable for the nutrition of the organisms.

The most important infections which can be controlled by sulphanilamide are those due to hæmolytic streptococci, meningococci, gonococci and the colon bacillus. Sulphapyridine is equally efficacious in the same dosage weight for weight, but produces more profound general disturbance, is prone to cause serious vomiting, and has a greater tendency to obstruct the urinary passage with crystals of its exceptionally insoluble acetylated derivative. It finds its specific *role* in pneumococcal infections for which it is effective and for which simple sulphanilamide is relatively useless. A third drug, sulphathiazole, deserves attention. It prolongs the life of mice infected with staphylococcus aureus (Barlow and Homburger[5]) and, if administered prophylactically, protects mice against inoculation with this organism (Rake and McKee[6]). Fleming[7] has produced laboratory data which show that in addition to its influence over the staphylococcus this compound is even more effective than sulphapyridine for all the bacteria mentioned above. Clinical observations on staphyloccal infections in man treated with sulphathiazole have not been very encouraging to date. It is twenty-five times more insoluble than sulphanilamide and in animals leads to urinary calculi of obstinate permanency. For these reasons and because of its tendency to cause distressing skin eruptions it may never come widely into general use.

TOXICITY.

Acute (C. N.S. type).—The toxicity of the different members of this group varies considerably. As judged by parenteral injection of the sodium compounds into mice the relative acute toxicities of sulphanilamide, sulphathiazole and sulphapyridine are as 1 : 1.3 : 2.6 respectively (Long, Haviland and Edwards[8]). Death occurs within twenty-four hours with vomiting and signs of profound depression of the central nervous system. This action on the brain is probably responsible for the headache, depression, somnolence and mental confusion which are often observed during the therapeutic administration of these drugs. Although there is a definite relationship between dose and toxic effect, the variation in individual susceptibility is very wide indeed. The feeling of general illness is most conspicuous when sulphapyridine is used. Patients taking this drug are commonly pallid, nauseated or even vomiting—a miserable sequence which appears to be of reflex origin excited by the irritant action of the drug whilst in the stomach.

Blood Changes (Aniline type).—Toxic effects arising after the absorption of therapeutic quantities are of frequent occurrence, but not often serious. In general they are such as might be expected from the administration of a drug with an aniline basis. Cyanosis is almost universal with full therapeutic dosage. It appears to be due to the formation of three abnormal pigments in the blood—namely, sulphæmoglobin, methæmoglobin and a coloured derivative of sulphanilamide itself. The discolouration may be nothing more than a faint lavender tint discernible through the nails or may approximate to the deep blue cyanosis of severe congenital heart disease. The change rarely, if ever, causes any distress, but experimentally the blood can be shown to have lost a significant fraction of its oxygen-carrying capacity. Deleterious effects may be produced on the blood-forming tissues. Agranulocytosis, due to a failure in the production of polymorphonuclear leucocytes is the most serious derangement of this kind. Minor degrees of simple anæmia are extremely common,. Severe anæmia of aplastic type is well known and several instances of hæmolytic anæmia have been recorded. Twelve daily intramuscular injections of sodium nucleinate 1 cc. (" nuclein ") control neutropænia satisfactorily, but complete agranulocytosis is always an alarming complication and may be fatal. The common anæmias respond well to iron and ammonium citrate or colloidal iron hydroxide given by mouth, and the more severe types, both aplastic and hæmolytic, usually recover after a course of such treatment combined with one or more transfusions of blood.

Allergic.—Other responses are allergic and represent modified reactivity of certain tissues rather than excessive sensitivity. Usually they are not seen until treatment has been prolonged for more than ten days. They take the form of rashes and fever. The commonest skin eruption is an erythema, but the rash may be hæmorrhagic. Urticarial wheals and vesication sometimes occur. Apart from simple allergic types some of the rashes appear to select areas which are particularly exposed to light, and it has been suggested that the skin of such patients may have become specially sensitised to light by the porphyrins which are produced during sulphonamide therapy. Porphyrins of several kinds can be isolated from the urine consistently, but their excretion is not confined to individuals exhibiting rashes. Febrile responses can be provoked by several drugs—*e.g.*, injected colloidal sulphur, tetrahydro β naphthylamine and dinitrophenol—but the sulphonamide fever is peculiar in that it does not manifest itself at once, and for that reason it should be classified like the simpler rashes as an expression of allergy.

Urinary. — The urinary complications have already been explained. Sulphanilamide is the east likely to lead to trouble of this kind and sulphathiazole has the greatest tendency to deposition in the kidneys, ureters and bladder.

REFERENCES

1. Domagk, G. *Dtsch. Med. Wschr.* 1935, LXI, 250.
2. Leedham-Green, J. C. *B.M.J.*, 1941, i, 586.
3. McIntosh, J., and Whitby, L. E. H. *Lancet*, 1939, i, 431.
4. MacKay, M. E. *B.M.J.*, 1941, i, 747.
5. Barlow, O. W., and Homburger, E. *Proc. Soc. Exp. Biol.*, 1939, XLII, 317.
6. Rake, G., and McKee, C. M. *Proc. Soc. Exp. Biol.*, 1940, XLIII, 561.
7. Fleming, A. *Proc. Roy. Soc. Med.*, 1941, 342.
8. Long, P. H., Haviland, J. W., and Edwards, L. B. *Proc. Soc. Exp. Biol.*, 1940, XLIII, 328.

To Those Entering the Clinical Period

By Dr. A. H. Douthwaite

THE incident of war has rendered your personal attributes of greater importance than ever before. This is no longer a period of smooth transition from medical school to wards. You are liable to disturbed nights, working against fatigue, to personal danger, and to hazardous duties for preserving your hospital and its patients from destruction. You will follow the standard set up by your predecessors last winter and will emerge with the satisfaction of having accomplished something greater than the mere acquirement of medical knowledge. The difficulties which you may experience in pursuing your studies are fully understood by your teachers, who realise that the strain of working for examination in the present disturbed state is at times almost insupportable. If, nevertheless, you succeed you will have gained self-respect and self-reliance such as will stand you in good stead in the future.

As to the planning of your studies, accept the fact that last-minute cramming for final examinations is of no use. The subject is too vast for any than gradual absorption, so it is well to follow some plan from the outset. The Preliminary Clinical Period prepares you thoroughly for the routine examination of patients, and thus prevents waste of time when you enter the wards. Beds and their human contents are allotted to you, and therewith your share of responsibility. The taking of the medical history is the most important step towards arriving at diagnosis. This is primarily your job, and its value cannot be over-emphasized, though too often forgotten in a desire to search for physical signs of disease. The ability to sift the relevant facts from matter which obscures can only come with experience. In the meantime, bear in mind the value of facts, as opposed to patients' interpretation of them, and of their presentation in a legible, and, where possible, schematic, form. When writing a report, do so with the thought that on its accuracy may depend the outcome of valuable reasearch undertaken years later. Whenever possible, examine your patient before he is seen by the registrar, and commit yourself to a diagnosis. Progress of the disease, ultimate outcome, treatment given, opinions expressed on diagnosis, should all be entered to make the records of lasting value. Forms are now issued on which you can write down your findings and conclusions, and this should be done. It is the only way to avoid that type of mental dishonesty which leads to brilliant differential diagnoses any one of which can be claimed as a personal success at a later date! This dangerous habit once acquired is difficult to discard. It meets with but scant respect, however, from the relatives of the sick. Mistakes have a high educative value. They snatch one with a jerk from the danger of self-complacency.

Probably the best plan of study is to concentrate for the first three months on pathology. This entails, of course, frequent visits to the post-mortem room. Given this grounding, symptoms and signs become the natural expression of the disease and their memorising is unnecessary. The most valuable time of the day for the acquirement of practical knowledge is that which follows the afternoon round. It is then that the house physician performs lumbar punctures, collects blood, taps chests and so forth. These procedures should be watched and from time to time you will be given the opportunity of carrying them out yourself. It is now, also, that special signs referred to in the teaching round can be re-examined and thus fixed in the memory. It should be made a point of pride that within a fortnight you should be able to inspect the optic discs of any patient you may choose. Once the knack has been acquired, and it usually comes quite suddenly after several days of disappointment, it will never be lost. It takes many months to be certain of the normal as opposed to the diseased disc, yet recognition of early change may be of the utmost importance in determining a diagnosis and possibly even in saving a life.

The patients in your beds will confide in you possibly more than in the house officers or staff. To them you are their doctor and from you they will try to get confirmation of their fears in respect of illness, or of suspicions in relation to earlier treatment. An immense amount of mischief is caused by the making of unguarded remarks which can be misconstrued. Their avoidance is doubly difficult in a teaching hospital, where a discussion on the problem is too often carried out within earshot of the patients. We all err unwittingly in this respect, and the importance of discretion needs reiterating. The fact that a patient can inspect his own report is deplorable and should be remedied.

Attend Out-patients' when you can. This is the only hospital activity which remotely approaches the conditions which obtain in general practice. The frequent absence of physical signs may be tedious, but precisely for this reason is the experience invaluable in forcing you to rely more and more upon history-taking. It is an antidote to the poison of mechanised medicine, whose virulence increases with every new instrumental aid to diagnosis.

Insure your life and health, and join a society for protection against possible legal proceedings as soon as you are qualified.

In moments of despondency remember that Medicine is the only profession which never provides two days which are alike, and in which boredom is a rarity.

Clinical Work at Guy's in War Time

SINCE the War Guy's men have studied medicine in Sector X, and it may be useful to those now entering the wards to outline broadly the present distribution of appointments over this large area. The pre-clinical class is now at Pembury, and the next appointment—Surgical Ward Clerk—is also held at this hospital. In this way use is made of the special advantages that Pembury offers as an introduction to clinical work, and the student may feel secure in his " digs " for six months. Contemporaries are split into two groups for the next appointment (Junior Medical Ward Clerk), so that half stay at Pembury while the other half move to Farnborough ; but in the following appointment (Junior Surgical Dresser) they all meet again at Farnborough. The next appointment is variable, but it is so arranged that after fifteen months in the wards everyone will have spent six consecutive months at Farnborough in order to avail himself of the routine classes in pathology that Farnborough offers. The midwifery and children's appointments are held at Farnborough, so that everyone spends another six months at one or other of these hospitals. The appointments of Senior Medical Ward Clerk and Senior Surgical Dresser are both held at Guy's, and it is here that the more senior students have an opportunity of seeing general out-patients and of gaining experience in Front and Back Surgery work ; they also form the backbone of the casualty and other A.R.P. organisation which has so often been called upon to work at Guy's when London has been bombed.

Appointments in the special departments are for the most part held by senior men centred on Guy's because the out-patient work is such an important part of the teaching, but with the development of so many of the specialities in the Sector hospitals clinical work is available, not only at Guy's, but also at Orpington, Farnborough and Pembury. When he has finished his compulsory appointments, the choice of work and hospital will generally be influenced by the preference or special needs of the individual, and other hospitals in the Sector will make their appeal. Thus, for those who seek special clinical teaching in pulmonary tuberculosis together with opportunities for revising their general surgery and orthopædics, Preston Hall, Maidstone, with its generous welcome, will attract its full quota.

Although the scheme that is outlined here represents the average movements of a student during his clinical career, variations from the average are frequently made to accommodate special needs of individuals or to fit in with local changes in teaching facilities. Any scheme must be fluid to work at all at the present time. One special problem is likely to occur in these circumstances—viz., that a student may find it difficult to fit in compulsory routine lectures with his programme of clinical work at such widely separated places. In an attempt to anticipate this difficulty every student should, at an early stage in his clinical career, visit the Medical School Office at Guy's and review broadly his plans for fitting in courses of compulsory lectures at Guy's and elsewhere with his proposed appointments in the Sector hospitals.

Before the War most men, when they entered the wards, wished to become qualified as quickly as was compatible with sound training. This wish arose from a very natural desire to progress and, in many cases also, from the economic necessity of not wasting time. Since September, 1939, the desire and the necessity have not diminished, but an over-riding need has been added by the national importance of becoming qualified as soon as possible. The war has made it more difficult to learn and more difficult to teach medicine, but it has also made it imperative to learn and teach it quickly. This is the immediate task for the student and the School.

To Dental Students

By F. Bocquet Bull, M.R.C.S., L.D.S.

THROUGH force of circumstances I am compiling this short article addressed to the new students entering the Dental School this term at literally twenty-four hours' notice. I have thought fit, therefore, to tender the same advice in the same words to you as were addressed to the new Dental Students twenty years ago by the then Senior Dental Surgeon, Mr. Montagu Hopson, happily still with us as a Consulting Dental Surgeon. I do this for two reasons, the first because the advice is the best that could possibly be tendered; the second, because no man could give good advice so charmingly and sincerely. And so I have not the least hesitation in addressing you now in his words, amended only where necessary by reason of alterations in regulations of Examining Bodies and School for present-day requirements.

" Now there must have been some reason for your choice of school. It may be that it is a tradition in your family to have a son at Guy's; you may already have friends here; or it may be that its reputation reached you in lands over seas. Whatever factor determined your choice it must obviously have been such as redounded to the credit of the School.

" Rest assured, then, that we bid you a hearty welcome and extend to you the right hand of good-fellowship. That Guy's right hand will always be within your reach so long as you remain a good fellow, but I would impress upon you straight away that here we expect and demand a high standard of fellowship, not a suppression of individuality, but a generous surrender of all self-interest, in order that you may play your part in maintaining the traditions which have made our Hospital and School famous and honoured all over the world. In short, when you have been here some little time you will find that to be a true Guy's man entails obligations, for it is a high calling to which you will need to devote yourself for life.

" To those of you who have not yet done chemistry, physics and biology I would say this: let those subjects be your first and chief concern. Get your preliminary science examination over as soon as you can. These subjects are the necessary preliminary to the study of physiology and anatomy, including special dental anatomy, and these together comprise the subjects upon which your life's work must be built. Unless you have a sound knowledge of what organs are like in health, of their gross and minute structure, and how their functions are carried on, you cannot possibly understand the changes produced in them by accident or disease. Hence you cannot pay too great attention to the normal. Further, many of the greatest advances in medical knowledge to-day are due to the researches conducted by workers in bio-chemistry, so that without a basal knowledge of the subjects you will neither be able to appreciate the significance nor the application of their discoveries.

" Although you propose to practise a specialty your success will depend upon the possession of that wider knowledge which embraces the whole and not merely a part.

" That you have to pursue a course of study differing from that followed by a medical student is due to the fact that dental tissues when injured or lost are not built up again by Nature in the same manner as other body tissues. They have to be restored, in part or in whole, by foreign substitutes. Hence you need to possess a knowledge of materials and their properties, and be master of a method of technique not required by other practitioners of the art of healing.

" But dental disease does not differ from disease in other parts of the body. It is only in its manifestations, and these are due solely to the peculiarities of the composition, structure and relations of the tissues involved. Teeth are not separate entities; they are living parts of a living whole. There is no such thing as dental pathology as distinct from general pathology. Operative technique is of the utmost importance, but it is of no value—indeed, it may be exceedingly harmful—unless it is based upon a sound knowledge of general disease and the morbid processes thereby induced.

" In your last two years you will be engaged upon clinical work, which will add to your responsibilities, for you will become a servant of the Hospital as well as a student in the school. Guy's is a charitable institution founded by Thomas Guy for the benefit and relief of the sick and deserving poor. It is a public institution and, as such, is subject to public criticism. It behoves you, then, in your relation with the patients coming under your care to be ever mindful, first, of their welfare; and, secondly, of the reputation to this Hospital has gained during the two hundred and twenty years of its existence. The poor people you will come in contact with are deserving of the same care, courtesy, and sympathy that you will extend, I trust, to your private patients later on. Be thorough in your work, but let this thoroughness be tempered with consideration.

" Finally, I would commend to your notice the following maxims :

It is the function of a teacher to help the student to learn.

It is better to learn than to be taught.

Test all things and prove them for yourself.

Method and tenacity of purpose will carry one further than mere cleverness.

Work to know, not merely to pass examinations which are but necessary evils.

Observe, compare, reflect, record, and you may discover a new fact, for there are more things we wot not of than those we know.

' Wisdom is humble that he knows no more.' "

To Those Entering the Nursing Profession

"TO those entering the nursing profession !" Never before in the history of nursing have these words been fraught with so much sense of responsibility as they are to-day. The nursing profession with the rest of our organised civilisation has suffered through the War. The fact that it has suffered nobly is due chiefly to the past. You must help with the present and look to the future. Now is the time to put our house in order. The post-War problems to be solved are numerous and the task of reconstruction immense. First-class brains, courage and hard work are needed. Your choice of profession is a particularly happy one at the present time, for you are giving valuable help to your country and, at the same time, following a most satisfying career.

Like other large London hospitals, Guy's has enlarged its boundaries. As well as the beloved island in the Borough we have the lovely county of Kent, which has, alas, earned the title of " The Cockpit of England." We have had our ups and downs, our sunshine and our gloom. We have experienced to the full the meaning of the word " frustration," and if there is any truth in the saying, " It is strengthening to struggle," we should emerge from the conflict like two lions. We realise that the spirit of Guy's that means so much to us all exists, not only in the buildings of Guy's, but more truly in the work of Guy's men and women wherever it is done.

You are immediately concerned with your training. Although the nurses' training has suffered in some ways it has gained in others. I am sure you will all agree that the Preliminary Training School is most happily installed near the Guy's School of Medicine at Tunbridge Wells. Later, as you move from one base hospital to another you will find a variety of experience and plenty of good nursing to be done. At the end of your training, wherever it may be, there will not be much that has been missed out.

In conclusion, keep or cultivate those senses of infinite value, a sense of proportion, a sense of humour, your commonsense, and one more, a sense of vocation. Nowadays, when much is being done—and quite rightly—to improve the lot of nurses a sense of vocation is in danger of being submerged. You must believe that nursing is a vocation or you will not make a good nurse. In other words, you must have taken up nursing for what you can put into it. Good luck and happiness to you all.

F. T.

Sector News

Guy's Letter

NO ONE to-day doubts the therapeutic value of sport and pastimes

" Sweet recreation barr'd,
what does ensue
But moody and dull melancholy."

Indeed, the seriousness with which we play has long been a characteristic of our national life—an enthusiasm which is sometimes lacking in the more savage game of war. Thus, Colonel Bramble remarks that " to interest an Englishman in a war you need only suggest that it is a kind of boxing match," and again, " Tell us that the Hun is a barbarian, we agree politely ; but tell us that he is a bad sportsman and you rouse the British Empire. . . . Bombing open towns is nearly as unpardonable as fishing for trout with a worm or shooting a fox," continued the Major.

" You must not exaggerate, Parker," said the Colonel calmly. " They are not as bad as that yet."

Of course, every man has his favourite pastime. A senior anæsthetist favours model trains ; a physician builds meccano ; and so on. We, here, are fortunate in having a full-sized billiard table on the roof of Nuffield. Many tense matches take place on this : one particularly between two surgeons. The balls are guided by threats from the one and pathetic entreaties from the other. These form an amusing contrast as they echo over to the Medical Block. We hope to publish a series of cases that show the advantage, when potting the red, of following up the movements of the ball by rotation at the hips and adduction of the shoulder.

We cannot resist recording this conversation between an honorary and his houseman. So often, the latter, emerging from the long and sometimes impacted labour of the final exams. feels hesitant as he first practises medicine. But the wise man soon develops a confident exterior or, maybe, bluff that conceals this inner diffidence for the benefit of the patient.

Mr. M. : " Give the patient some ——"
K. M. : " What dose do you prefer, sir ? "
Mr. M. : " What dose do you generally give, M. ? "
K. M. : " Quite a moderate dose, sir."
Mr. M. : " Excellent ! Give a moderate dose, M."

C. H.

Orpington Letter

SINCE the last Letter was written the authorities have provided the Hospital with an operating table for general surgery. Its presence at Orpington is very much appreciated and the greater measure of efficiency and easier working in the theatre is already obvious.

The Orthopædic department, which has always been prominent here, is again increasing in size under the pressure of more work. This increase, like all true expansions, is to " n " terms where *n* equals the last man in Kent to be seen by Mr. Lambrinudi.

The influx of new patients and the opening of new wards has entailed much administrative work. Coincident with this was an " All Change " in the nursing world. Sisters and nurses have vanished from the wards with which they have been so long associated and have re-appeared in the most unlikely places. This eruption, second only to Krakatoa, has indeed wrought great changes with the intention of furthering the general work of the hospital and the training of the nurses.

Tuesday saw the opening of the concert season. Under the direction of Misses Green and Bailey the patients gave probably the best show yet seen here. The laughter caused was so uproarous that at last to laugh became a painful process and certain gentlemen in the front row found they were " beside themselves " with mirth. Not only was this entertainment amusing, however, but also instructive ; the demonstration on the use of the stirrup-pump was particularly appreciated.

We have had several of our former colleagues visiting the hospital during the past fortnight. Brian Johnson made a flying visit from his retreat in the North—like Cassius ne nad a lean and hungry look. It would appear that Yorkshire *per se* does not suit him. Silas Clarke and Peter Swift also came to see us. We wish them well in their new activities. Our mutual friend with Guy's finds Orpington too attractive to leave altogether and so, to soften the blow, we are honoured by his company twice weekly—a happy arrangement for all !

G. T. H.

Pepenbury Epistel

WHAN tweye yeer y-go the sonnes cours
Ley wher the Virgin wayts er vertuous,
The clouds of werre darkened the skyes
And hidde him from toiling men at Gyes.
Than hadden folk a saufer hoom to seke
And with hem to attend thos ill and weke
A companye wel skilled in surgerye
And phisik maad to tak hir wey from here
To Pepenbury by the Wells of Kent.
And first y-mong the band of men ther went
A Surgeon well couthe in al the londe
Kind coude he be, eek courteys, thogh fonde
Of tesing hem he toghte which made hem smert,
Thogh smerter Yaf he noght for taaking pert
In reveles at night-clubbes ; wolde he
Only go ther with his wyf for te.
A Doctour of Phisyk ther was and wel,
Whan Londoun was his hoom, his cloth he fil.
But since he hath to cook his oune banger
His cote dropeth doun as from a hanger.
He knew of everich reynes maladye
And with him cam oon that Pathologye
Professed and whos not-heed shoon his leyt
Insyd the morg til he be put to flight
By stinke of rooting corses. Eek was ther
A Surgeoun that bones coude repayr.
Ful parfit weren his results at ende.
A Doctour cam the childer seek to mende,
But yaf he ech a second maladye.
And of him somdel later wil ye here.
Of oon Phisycian yet wil y tel
Whos patients so quickly gat he wel
That ever were his beddes haf empty.
A smale Surgeon was her, and he
Lat cam, than went, and later cam agayn.
Lang toghte he, of knowledg was he pleyn,
And preched " Mister wardclerks, *vanitas*
Vanitatum omnia vanitas."
A Gyne was ther his temper he ne losed,
But wo the man that hath him ever crosed.
Eek ladyes came in blake and blew and strippes
To tenden to the seke and serch for pippes.
Eek lyter men ther weren came and went,
And wirked they ful long and diligent.
But harde werk sholde have been recompense

And of an even wolden beer dispence.
Than, certayn, is ther noyse for the nones
And mess that shokes sosters to the bones.
Oon was who knew ech drogge in the toom
And al that lyve insyd the nurses hoom.
And oon that studyed the herte a lotte ;
Seinte was oon, oon was a simpel clotte.
Oon lived wel awey, but wolde visyte
His patients whan seke if it was light.
Oon was ther from the Principalitye
And pleyed he on knees of yvorye.
And oon mid-housband was and hapye he
Whan, forks in hand, coude chet of Natur be.
A *pricasour from* Oxenford was oon,
Woot he al faire wommen in the toun.
And oon that whan at mete scars desist is
From leping in the dish and using fistes.
And of these men and wommen, muche and lyte,
Ther has been writ ther dedes and ther plighte
By that sam childers man of whom y tolde
And on this day is tweye yeer olde
His first epistel. Therfor is this writ.
This explanacioun now doon, y quit.

G. L. L. R.

Sherwood Park Letter

It is not the intention of the writers to make these letters strikingly original, but solely to present to all who care to read an interesting *résumé* of the life and work of the students down here Our excuse is that in so doing there will be something in the *Gazette*, other than the rugger, that we will understand.

We have been here for two years, not very pleasant years for the world, but, in our small way, we are forging slowly ahead in the knowledge that sooner or later we will be able to cure some of the ills so manifest in the world of to-day.

As we write this sitting over our bucket of coal we wonder if this winter we shall once again go stamping around shaking snow off our boots and trying in vain to maintain a warm feeling inside. The prospect is bleak, as hitherto we turned to the bottle, but the bottle is nearly empty, and as the black-out descends it becomes more and more difficult to find the bottle. Still, the sight of folk skating down Mount Pleasant in awkward positions was usually enough to revive our interest in life.

Once again the dissecting rooms are a haven of industry and, above the babble of conversation we hear such phrases, " Home Guard again . . . Silage . . . Calverley . . . ," but, unfortunately, little of such subjects as medical reform, which seem rather more vital.

We should like to thank the Dean and his colleagues who have laboured so hard to make everything down here a success, and we assure them that they have not laboured in vain. They have tackled many difficulties, amongst which was the temporary hostility of the natives who almost seemed to resent our invasion more than the prospect of one from overseas ; perhaps it was because we did arrive standing up and under our own power

So we leave you, as we found you in the everlasting doldrums of Tunbridge Wells. And hope that in the future we may present a nore palatable menu.

D. P. N.
C. B. C.

The Wildernesse Letter

At last we are able to report the arrival of the long-expected student body. Renton and Crittenden have joined us, and apparently they have not found it quite so dreadful as the gloomy picture presented to them had suggested. Renton's two tries in the first rugger match speak well for Wildernesse food and air.

For about a fortnight now Martin has been in bed with 'flu, but we hope to see him soon on the allotment again, where the soil is being looked after at present entirely by the worms.

D. M. J.

Southern Letter

We are interested to learn from our Orpington contemporary of the quaint desire, evinced by some, for self-torture on the hypothetical basis of increased fitness.

He will be pleased to hear that we have been privileged to see the sad results of such masochism in one of those concerned. His agony on attempting the ascent of any stairs was pitiful to see, and we are seriously considering the building of orthopædic bungalows with the provision of bath-chairs for the benefit of visitors.

We are very happy to welcome to the Mess two American practitioners Dr. Keedy and Dr. Caturani. We sincerely hope that they will enjoy their stay with us and find their new circumstances both profitable and pleasant.

The music has begun again and, in its final crescendo, Arthur Rushforth is to sit down at Lewisham. His stay with us has been all too brief, but, in wishing him the best of luck, we would remind him that we would still like a few surgical crumbs from his new home, which, up to now, is bidding fair to become a fruitful source of cold carpentry.

The official attack upon *Pulex irritans* was, we are happy to report, an unqualified success. It appears, however, that once old Dame Nature has her claws into one it is futile to resist, for the houseman in whose room the battle was fought has now been attacked by another, and more deadly invader, namely *Sarcoptes scabici*. It must be added, in his defence, that it is his province to look after service dermatology; his recent herculean contortions in the self-administration of benzyl benzoate speak volumes for his faith in his own potions. Physician, heal thyself!

Tail piece—ward sister to Pathology department, "What sort of bottle do I need for a blood picture?"

H. P. G.

Reviews

Surgery of Modern Warfare. Part V. Edited by HAMILTON BAILEY. Published by Messrs. E. & S. Livingstone, Ltd., Edinburgh. *Price 17s. 6d. net.*

THE final Part of this work includes the sections on wounds of the face, neck and special senses; on wounds of the central nervous system; on subtropical surgery; on administration; and an appendix.

The chapters on injuries to the ear, air passages and air sinuses by Mr. V. E. Negus are good. A good account is also given of injuries to the spine and cord, though more might have been said concerning the important subject of after-care of patients with paralysis. The chapter on injuries of the brain and skull leaves something to be desired; it gives the impression of being cramped for space. It is with diffidence that one criticises the writings of Mr. Norman M. Dott, but little assistance is given on the important subject of the differentiation of intracranial hæmorrhage from cerebral contusion with œdema. The neurosurgical tendency to "look and see" makes itself apparent, but most general surgeons would wish to avoid craniotomy on patients with cerebral contusion. The specialists' desire to have all "head cases" transferred to a neurosurgical centre is again brought to the fore; but, with a competent general surgeon available, few people would consider it safe to transport for twenty miles a patient unconscious from a compound fracture of the skull in order to allow him the privilege of a four-hour operation by a specialist.

The section on administration might well have been omitted, for the chapters are much too brief to be of any practical use. Civilians are given but a glimpse of organisation in the Armed Forces; and the account of the Emergency Medical Service can scarcely be expected to enhance the reputation of that body with the Forces. In any service, moreover, the theory, principles and practice of "Filling in of Forms" surely demands a large volume of its own; the few lines given to this subject on p. 820 will break the hearts of bureaucrats—and such complete oblivion is beyond even the wildest dreams of reasonable men.

Two points on the choice of anæsthetic demand serious criticism. In the chapter on wounds of the neck Mr. Hamilton Bailey recommends intravenous anæsthesia for such patients, founding the choice upon his experience with cases of Ludwig's angina. Most anæsthetists would disagree profoundly with the use of the pentothal group of drugs in such cases where upper respiratory obstruction may be a most dangerous feature. Again, in the Appendix, the Editor does not agree with the generally accepted use of inhalation anæsthesia in shocked patients. Intravenous anæsthesia is once more recommended and there is an implication that local anæsthesia possesses considerable advantages. The large doses of pentothal required for prolonged operations must be particularly dangerous to shocked patients who will almost certainly have had equally large doses of morphia. Whatever Comrades Pschenichnikov and Novikov may have done with local anæsthetics, anyone at all familiar with the numbers and types of cases to be dealt with in a London blitz will realise that such a form of anæsthesia is both undesirable and impracticable.

The Appendix, comprising fifty-three pages, is an attempt by the Editor to abstract the articles on war surgery which have appeared since the publication of this work. To be of any value, such a series of abstracts must fulfil two criteria: the articles abstracted must be selected for their special importance, and the individual abstracts must be critical. There is no evidence in this Appendix of any attempt at selection; a glaring example of this failure to separate the good from the bad is the inclusion on p. 831, with a diagram, of a method "urged" for first-aid treatment of a shocked patient. The published articles on war surgery over the last two years may justly be summarised as a spate of balderdash and bunkum interspersed with an occasional article of value. Such literature surely demands a considered review rather than an unselective summary. The individual abstracts, too, are almost entirely uncritical. They are for the most part couched in such terms as A. " says "; B. " finds "; C. " asserts "; D. " remarks "; E. " considers "; F. " states "; G. " advocates "; H. " concludes "; I. " suggests "; and J. " wonders." The reader, " trained, but not necessarily highly experienced, in civil general surgery," whom we will call X., might reasonably ask, " What does poor X. *do* ? "

S. H. W.

Lectures on War Neuroses. By T. A. Ross
Published by Edward Arnold & Co., London.

THIS volume consists of lectures given to battalion medical officers and general practitioners. It is primarily a clinical book in which emphasis is laid on symptoms and treatment.

The War Neuroses are divided, broadly, into the acute and chronic ones, the latter being cases which have been allowed to lapse into the chronic stage. This classification is of some importance from the therapeutic point of view. Some mention is made of prophylaxis. The author is in agreement with the late Dr. Mapother, who years ago expressed the view that " at all times the most important single influence determining the incidence of war neurosis is that of the Regimental Medical Officers." It is for them that this little book of barely a hundred pages is intended.

Crammed with sound practical advice, lucid and succinct in exposition—this book should serve its purpose most admirably.

Like many good clinicians, the late Dr Ross was somewhat of an eclectic, and many schools of psychological thought are represented in these lectures.

Recently the scientific validity of study of mental phenomena without reference to physiological activities of the brain has been questioned. Misgivings about the propriety of such isolation of mental phenomena lie at the bottom of pleas for a biological or neurological approach to psychology.

One of the principal methods employed by science is that of " abstraction," i.e., a method by which certain aspects of reality are studied without reference to other phenomena occurring at the same time, the latter phenomena are regarded, *ex hypothesi*, as remaining constant or as not having any relation to the subject pinned down for investigation.

Theoretically, therefore, the study of mental phenomena " in themselves " can be justified on the plea of expediency. If such a study of mental life is conceded, then psychology should be allowed to fashion its own tools. " Free association " is such a method, and as Emanuel Miller puts it, " utterances of patients in free association are as much phenomena as myographic tracings."

The theory underlying all such investigations is that a relationship exists between mental states and that this relationship can be expressed in propositions which take no cognisance of brain physiology.

As Dr. Symonds has recently expressed it, these methods " have helped to show the meaning of individual symptoms and have proved in certain instances the importance of forgotten experiences and unrecognised cravings in contribution to emotional unrest."

The purely " body " or physiological approach to the problems of " stream of thought " is, however, equally justified. So far it has yielded results which in some way or other have been variations (of different degrees of complexity) on the theme of " *Ohne Phosphor, Kein Gedanke* " (no thought without phosphorus), the war-cry of the " materialists " of Germany in the 'sixties, when it was even suggested that fishermen are more intelligent than farmers because they eat so much fish which contains much phosphorus.

But new ground has been broken recently when Dr. Symonds formulated his view regarding the constitutional basis of affective disorders and about the essential unity of some psychoses and neuroses; these generalisations are of considerable value and will undoubtedly prove of far-reaching importance.

Finally, there is the school of behaviourists; mind is omitted from their studies as being irrelevant. Their main contribution has been to show the peculiar aptitude of the brain for acquiring habits.

It has been contended that mind and brain should be considered as a unit. Science, however, has always been most successful when tackling problems piecemeal. The artificial subdivision of Nature is an essential preliminary to any scientific investigation; it has, however, produced such apparent dichotomies as individual and society, mind and brain, environment and heredity.

The relationship between psychology and neurology is somewhat analogous to that which existed between biology and physical sciences at the beginning of this century Professor J. A. Thomson then argued for the autonomy of biological sciences. He contended that every region of Nature must be first examined independently in order to find the special laws of that region before anything can be achieved by the application of general laws from other regions.

If the ephemeral nature of some scientific theories is borne in mind, some of the extravagances of present-day psychology can be viewed with greater complaisance than would otherwise be possible.

S. B

Keats. By BETTY ASKWITH. London: Collins, 1941. Pp. 288. With portrait. *Price* 12*s.* 6*d. net.*

THE interest shown in the life of John Keats is one of the most striking things in English literature to-day. One would think that his life had been written so often that there was nothing more to be said. Nor is there for his first biography, written by Lord Houghton, is still the best and next to it is its successor in the English Men of Letters series by Sidney Colvin, a book which he spoilt thirty years later when he had become Sir Sidney and tried to " bring it up to date," but although all the new knowledge of nearly a century, all the accuracy of modern biographical methods have done little or nothing to enable us to understand him better, yet new lives of him continue to come out and are awaited and read with interest. The key to this enigma is indicated by Shelley when he wrote that:

> " . . . he is gathered to the kings of thought
> Who waged contention with their time's decay."

For if there is an English poet who was thinking and always thinking it was John Keats; and his thoughts were always moving. Even in his Guy's period there is a great advance from " I stood tip-toe " to " Sleep and Poetry," and from that again to the first two books of " Endymion." It was all good thought and perhaps great thinking, but it was the thinking of a very young man. Now, it is always hard to follow another man's thoughts, but harder still when they are the empassioned turmoil from a young man's brain striving to sort themselves into some order and to express to others something that he feels. For youth feels first, thinks next, and then may strive to put these half-formed thoughts into words. This is what Keats was doing and so, as we read him, there is always something we cannot grasp, something elusive, a little further off. Each new appreciation of his life gives us a hope that we shall grasp it. Here, then, is such a new appreciation of his life, and a very good one, eminently suited for those who have not Houghton or Colvin, or would sooner read his story in the light of the latest knowledge. So far as his time at Guy's is concerned this is nebulous, and yet it was an important time. Great stress has been laid upon the great eighteen months after the death of his brother Tom, and before he himself entered into the last stage of the family disease, but the eighteen months that he was at Guy's are just as important in the development of his mind. When he came to us he was one of three or four young men with the artistic temperament, all interested in poetry and trying to put that interest into verse. When he left he was not yet " with Shakespeare," but he was definitely among the poets. I agree with Miss Askwith that " his heart was never really in his work," but not that " his notes are well taken." There is nothing in the records of the Society of Apothecaries to show that he passed the examination " with ease." They do show that certain of his fellow-students were ploughed on the same day. It must be remembered that knowledge of Latin was in those days a part of the knowledge of medicine and was one of the subjects in the examination. Of what Keats did while at Guy's we know so little that it does not matter. With whom he associated is more important, and Miss Askwith surveys this very well. First his brothers, then Geo. Felton Matthew and Charles Crowden Clarke, and the switch over from them to Leigh Hunt and Benjamin Haydon. Of his relationship with other poets—Wordsworth, Coleridge, Shelley, Byron—I think she makes too much and of the so-called " immortal dinner." No doubt Haydon had a great influence on Keats in bringing him out, but his correspondence and Table-Talk have always seemed to me an over-rated work, and Keats' passing mention of the dinner a better estimate of its importance than Haydon's long description, and perhaps the two form an indication of the minds of the two men. The man who had the best and most lasting influence upon Keats was probably John Hamilton Reynolds, and for her assessment of their friendship we may give Miss Askwith top marks. Her chapter on this and his acquaintance with Rice and Bailey is one of the most illuminating in Keatsian literature.

In estimating authors we do not think enough of their publishers. It has always seemed a pity that we have not heard Ollier's description of their disagreement with Keats' brother George. We only have a letter from them written in the heat of annoyance for which Miss Askwith says there is " no excuse." After all, they did recognise there was talent in the unknown writer's manuscript, and to have a brother barging in must have been annoying. But in his second publisher—the firm of Taylor and Hessey—Keats was very fortunate. We owe a lot to them. At the risk of their own financial stability they encouraged young poets and published their works. If it had not been for them we might never have had " Endymion." That might not have mattered very much, except that if we had never had

" Endymion " we might never had the poems of the great eighteen months.

But we cannot continue the study of this book chapter by chapter. In the later story Miss Askwith uses very largely Keats' letters. This seems to me a mistake. There is probably more autobiography in his poems than in his letters. After all we should never have had the latter were it not for the former. One thing comes out. It is that Sidney Colvin's view that his love-letters to Fanny Brawne should never have been published was a right one. Let his story be a warning to every woman and a lesson that they should take the advice of the Minister of Supply and hand over to him the love-letters that they have received for pulping in the war effort. They are very ordinary, even the one that Miss Askwith describes as " one of the most perfect love-letters that he, or any other man, ever wrote." All we men believe we have done better, though we would not have our contention put to the proof. Our chief criticism of Miss Askwith's work is that she uses the love-letters too much, and those to George and Georgiana not enough. May I suggest that she gives us an edition of these last by themselves, so that they can be read straight through without the need for turning over the pages that we have in the edition of that prince of editors, Mr. Buxton Fonnan ? She might add as a second part those to John Hamilton Reynolds, for these also we need to read straight through. And having cavilled let me end by commending. Miss Askwith's description of the end is excellent. She has built it up in Severn's memoirs and the letters of Fanny Brawne to Fanny Keats. This, perhaps, is the most important addition to our knowledge of Keats since the time of Houghton and of Colvin. It was quite right that they should be published, for they are but the letters of one very ordinary woman to another, but Miss Askwith has shown us how valuable such may be in building up the story of one who—

" . . . like a Star
Beams from the abode where the Eternal are."

T. B. L.

Autumn Shadow and Other Poems. By DAVID STAFFORD-CLARKE. Oxford: Basil Blackwell 1941. Pp. 64. *Price 5s. net.*

I WONDER whether when John Keats was dresser to Mr. Lucas, that member of our staff who was " not overburdened with brains of any kind " knew that the little fellow going round with him wrote verses in his spare time. Certainly I did not do so when Mr. Stafford-Clark was my dresser; but here he is with a slim volume of verse published by that successor of Ollier, and of Messrs. Taylor and Hessey, Mr. Basil Blackwell. Now, I am not going to say that Squadron Leader (as he now is) David Stafford-Clark is going to be another Keats. No institution such as Guy's is likely ever to turn out such a person twice. But I am not going to say he won't be, because I do not believe that any generation can make an accurate estimate of its own poets. Time alone can settle their precedence. I do say, however, that this is a book that is not only well worth reading, but also worth putting on one's shelves. Most young poets seem to have had many lost loves. Tennyson, in his youth, must have addressed all the young ladies with romantic names of his acquaintance. Mr. Stafford-Clark is no exception to this rule, but he is wiser in his day: he does not mention their names. When a young author gives one of his poems as the title of a book we may assume either that he thinks it the best of his verse or that it was the most poignant of his memories. *Autumn Shadow* belongs to his post-Guy's period.

AUTUMN SHADOW.

For her I have loved; and I have wept
And grieved beyond weeping.
All the terrible relentless beauty of loving and awakening
Was there.
For her too there was a vision
And a dream.

But the wind that hurled the autumn leaf
Fragile, russet tinged, lovely,
High into the exultant sky—
That wind that might have blown for ever—
May blow no longer.

With the falling of the leaves it began
Was exquisite,
And now is over.

Here is one that may belong to the end of the Guy's period:

THEN.

In that warm night
There may have been a moon
Stars too, perhaps,
I cannot tell.

For there is much that I remember
But all the sum of it is this:
How lovely soft your arms were round my neck
How smooth your shoulders and
How grey your eyes.

And here a bit of one which may coincide with his entry into the wards:

ADORATION.

I thought I loved a maiden fair,
Her smile was swift—her beauty rare,
But now I think of her and swear
To Hell with Her.

* * * *

She simply had no use for me
She made that very clear, you see
For quite a little minx was she.
To Hell with Her.

But it is not on his love poems that we must judge him. In the year before the war broke out he felt certain it was coming and loathed the idea of it. This was written in Spring, 1939:

CHAPEL AT OXFORD.

Out of splashed sunlight on the daffodils
That flowed to quench the warm thirst of the grass
I walked alone;
The silence, clipped gently by my heels
Became suddenly dark and cool,
I was in Chapel.
Rich tinted from the lovely windows,
In streamed an altered light
Upon a Cross,
Emblem of tortured death, that men might live.
Dim lit, there was another emblem on a wall,
A list of names,
To mark another martyrdom, of those who gave
Their lives, that war might cease for ever from the earth.
Soon there may be
Another emblem yet, with yet more names, to testify
To one more hideous sacrifice. But we who die this time,
Will know it was in vain.

In a poem to a certain contemporary poet Mr. Stafford-Clarke has shown he can control hideous polysyllables, but he also shows himself a master of the monosyllable as in the following:

Doubting—but free
We were so sure.
'Never,' said we
'Can love endure'.
That was our creed.

We dared not call
True love our own.
Dared not risk all:
And now alone
Our hearts must bleed.

He also has the power of observation and description thereof:

A copse of silver birch trees with a path among them.
Frost in red bracken kissed by a misty sun,
All sorts of speckled toadstools, coloured by the joy
With which you saw them as you walked along.

More than others medical men feel the sadness of the death of a little child, and the doctor-poet finds therein a subject for his verse. Thus Keats, in speaking of Elysium, writes:

Another wish'd, mid that eternal spring,
To meet his rosy child, with feathery sails,
Sweeping, eye-earnestly, through almond vales:

And it gave rise to one of Dr. Bridge's best poems in "A Dead Infant," so Mr. Stafford-Clark writes an epitaph:

New born, and gulping air, this little child
Lustily wept, while all around him smiled.
Now hushed untimely by death's final sleep
Calmly he smiles. And all around him weep.

It is the war that has brought Mr. Stafford-Clark out of the ranks of the versifying youngster into those of the poets. His best, in my opinion, is his elegy on John, a young friend in the Air Force, killed when barely twenty-one, to whose memory with a line from Adonais he dedicates this book. Of the episodes of the war there has been nothing finer written than this on

H.M.S. JERVIS BAY.

All round, the restless tumbling desert of the sea,
And at the sea's edge, nothing but the sky
Circling the mighty wilderness of ocean.
Thirty-eight ships, forging their hidden path
Through all the dangers sailors know and face
And always have, and will, and always must
In every war on every sea since first men sailed.

When, seen through flying spray and rolling smoke
Of that great convoy, in the far horizon
There was a flash of greater guns than any
Carried aboard the escort of the merchantman.

At once the *Jervis Bay*, unarmoured, lacking speed,
With little power of fire—turned to engage the enemy,
Alone. Under her orders, all the rest dispersed
Behind their smoke screens. . . .
What is there to say
Of the short battle, merciless but swift, that followed then?
There are not words to tell of its reality

But that one ship, deliberate and unflinching,
Took the full horror of the raider's guns
And still outranged, was hit and hit again
Her bridge and superstructure burnt and crumpled,
Staggering like a man kicked in the teeth by a
giant,
But closing gradually the waste of sea
Between the two, where her small shells fell yet
Desperately short. . .
Broken and blinded, still the ship went on
Until the very sea flinched at her pain.
As the wind tossed her flag the last kiss of many
Blazing and silenced, but defiant still
She sank ; her heart torn open to the singing
waves.

She had not fought in vain.
Twenty-three ships came safely home, the price
Wrung from her enemy by her destruction—
One half-hour's blinding agony that each man
knew
Could have no end but death : it was the only way
To save her charges. And her Captain chose it.

If you could ask him what he did that day,
He'd say, " I did my job—I had no other choice ";
That is what he would say.

* * * * * *

I would recommend also *Retreat* and *Formation*.

T. B. L.

The British Encyclopedia of Medical Practice. 1940, Surveys and Abstracts (published April, 1941). 1940, Cumulative Supplement. General Editor: Sir Humphry Rolleston, Bt., G.C.V.O., M.D., D.Sc., D.C.L., LL.D. Published by Butterworth & Co., Ltd., London, 1941.

THE twelve main volumes of the British Encyclopedia of Medical Practice are now widely recognised as forming an admirable critical survey of the whole field of medicine, presented in the form of a series of articles arranged alphabetically, each written by a recognised authority in the particular subject.

In order to keep the text thoroughly up to date, supplementary volumes are issued each year, in which the more important medical literature relating to each subject is discussed and analysed. Two such volumes are published annually and they will be continued for at least six more years. The one, termed Surveys and Abstracts, 1940, is divided into three main sections : Part I consists of sixteen short critical reviews by eminent authorities, dealing with various aspects of medical and surgical practice with especial relationship to recent advances and to the problems resulting from the first year of the War. The first three deal with general medicine, surgery, obstetrics and gynæcology, whilst subsequent topics range from anæsthetics and blood transfusions to mental diseases and chemical pathology. Although short, these articles are well constructed, new aspects being presented and discussed without any attempt at dogmatism. Part II consists of an account of recent developments in drug therapy ; it summarises the important provisions of the second and third addenda to the British Pharmacopœia, 1932, dealing with the fresh nomenclature of synthetic drugs and the authorised war-time substitution constituents in various ointments and other preparations ; these are followed by a description of the various vitamin preparations and their dosages, of the new chemotherapeutic drugs and of drugs important in tropical medicine. Part III, which forms three-quarters of the volume, follows the plan of the articles in the original Encyclopædia in its scope : it is made up by the skilful selection and abstraction of a large number of British and foreign journals published during the last year, each article thus drawing attention to the latest work and opinions relating to the subject under discussion. This volume is primarily intended to be the second Annual Supplement to the original Encyclopædia which it brings thoroughly up to date, but it also forms in itself a full and valuable year-book for the year 1940.

The second volume is designed as an annual cumulative supplement to the original Encyclopedia A system of key numbers allows easy reference from the article in the original volume to the corresponding section in the supplement; being cumulative from year to year, reference need only be made to the current annual supplement for this purpose. In this way, any new information which has been published on any particular subject is readily available and convenient approach to the more important literature is obtained. Moreover, since the references quoted have been carefully selected, much valuable time which would otherwise have been wasted in tracing out and checking up on the innumerable articles of doubtful value which appear annually with reference to almost every medical subject is avoided.

N. A. N.

Fractures and other Bone and Joint Injuries. By R. Watson-Jones. Second Edition (Reprint). 1941.

THE universal enthusiasm with which the first edition was received offers adequate compensation for the labour and time spent on its production. This new edition is not merely a correction of the inevitable errors of minutiæ.

The knowledge and experience of a year of total warfare has necessitated rewriting the chapter on open wounds and fractures, incorporating a concise account of the principles of the surgery of war wounds. This is essentially a chapter of practical value. Prophylaxis of wound shock by early and adequate fluid therapy, heat, rest and morphia is stressed rather than a discussion on the controversial theories of ætiology. The technique of wound excision; the need to avoid burying foreign bodies; the indications for primary suture; and the value of the immediate Thiersch graft are all simply explained, whilst the closed plaster method of treatment for contaminated wounds is described in detail and accredited to its correct source.

The account of chemotherapy summarises the present views on the sulphonamide drugs, whilst the paragraph on gas gangrene lacks nothing by its brevity. Here the key word is " wound toilet." The subject of emergency amputations has been enlarged upon and modified and the views expressed, especially with regard to the definition and value of the guillotine amputation, coincide with the recent recommendations of the War Wounds Committee of the Medical Research Council.

New features include an account of fat embolism —a pertinent addition under present conditions— and a warning of the dangers of convulsion therapy in psychiatric practice, during which two-fifths of the cases sustain fractures of the spine or neck of the femur. Although mention is made of the plaster shoulder spica, the abduction frame is still given pride of place in the treatment of transverse fractures of the humeral shaft; but the critics of skin traction for fractures of the middle of the shaft of the femur will be pleased by the admission, without comment, of an account of balanced skeletal traction.

Everywhere improvement has been made; inept phraseology has been altered, diagrams better defined, inaccuracies of detail corrected and X-rays replaced or added. These additions and revisions do not increase its size but considerably enhance its value, so that it easily maintains its position as the leading text-book on fractures, a pleasure to read, a joy to possess and a fund of sound practical advice.

F. N. G.

The Scientific Photographer. By A. S. C. LAWRENCE, Ph.D. Published by the Cambridge University Press, 1941. Pp. 180. *Price* 18*s*.

PHOTOGRAPHY is now well established as an important auxiliary in the study of medicine, in both clinical and experimental fields. We are all familiar with the beautiful photographs of skin diseases and surface anatomy, to choose two examples, that appear in medical books and, because of their very quality, we imagine that such fine results can be obtained only by an expert. It is true that much ability and theoretical knowledge are required to make good photographs, but the theory is easy to learn for anyone who knows a little chemistry and physics and the ability will come with intelligent practice.

The purpose of this book is to supply this theoretical knowledge, and to relate it to the practical problems of photography. In this admirable purpose it is highly successful. All the processes involved, from composing the picture to making the final enlargement, are adequately and concisely dealt with, including a theoretical account of the different parts of the photographic system. In addition to the theory, much sound practical advice, drawn from the author's extensive experience in all branches of photography, is given. There is an interesting chapter on colour photography and practical details of the Dufaycolor process are contained in an appendix. The last chapter in the book deals with some scientific applications of photography. From the medical point of view, the most interesting parts of this chaper are those dealing with high-speed photography, which has been used in studying the division of ova, and photomicrography.

A certain elementary knowledge of photography is required of the reader and no space is wasted on describing things obvious to anyone who has used a camera frequently. By this means, and by eliminating padding, a comprehensive account of the subject has been given in 180 pages. In the past few years, the rapid growth of photography has created a demand for a book of this type and the reviewer has no doubt that Dr. Lawrence's book will help considerably to satisfy that demand. It can be recommended to all those who wish to graduate from " button-pushers " to serious photographers, which should include all owners of cameras.

M. L.

Medical Handbook for Nurses. By I. STEWATT, S.R.N. Published by Faber & Faber. *Price* 6*s*. 6*d*.

MISS STEWART, in her new edition of the medical handbook, presents us with a concise and practical text-book which will be welcomed by the nursing profession for its valuable teaching matter at a price to suit the pocket of every nurse. The chapters, which are interesting and simply written, cover every aspect of medical nursing, including materia medica, diets and laboratory tests. The book should be of value to student nurses and trained nurses alike.

M. M.

Sport

Guy's Hospital Squash Club

EFFORTS are being made to prepare a series of matches, the object being to play as many Wednesday and Sunday games as possible on the two courts at the Hospital. It is the intention of the Committee to select the best available team from players all over the sector, and they are of the opinion that there is sufficient talent available to produce a side capable of continuing the successful run of victories concluded last May, when the side were unbeaten.

If any player, who has not appeared in any of the matches, with sufficient keenness to aspire to match play, will get in touch with Dr. A. Shein, he can rest assured that every encouragement will be given, as there will be vacancies to fill the places of those not now available. Particularly, the club is most anxious to encourage those at the Sector hospitals and the Medical and Dental Schools at Tunbridge Wells, and hope that players will find it convenient to travel so that the Committee may have an opportunity of selecting those approaching, or up to, the required standard. Only by knowing the material available can the Committee select the best side.

A general meeting will be held in the Physiological Theatre, Guy's Hospital, on Monday, October 6th at 12 noon. All squash players are invited to make a special effort to put in an appearance.

Hospital Information, etc.

Notices

The Manager would be glad to receive the following back numbers of the *Gazette* to complete Vols. 48 and 49 (1934) Nos. 1206 and 1211, (1935) No. 1212, for an University Library.

SOCIETY OF APOTHECARIES OF LONDON.

Examinations for October are as follows :—

Surgery.—October 13th, 15th, 16th.

Medicine, Pathology and Forensic Medicine.—Oct. 20th, 22nd, 23rd.

Midwifery.—Oct. 21st, 22nd, 23rd, 24th.

Papers by Guy's Men

Ryle, John A. The future of medical education as seen by a Teacher. *Brit. Med. J.*, 1941, ii, 323.

Grant, R. T. Memorandum on the observations required in cases of wound shock. *Ibid.*, 332.

——— and Reeve, E. B. Clinical observations on air-raid casualties.—II. *Ibid.*, 329.

Black, K. A one-layer operation for inguinal hernia. *Brit. Med. J.*, 1940, ii, 627.

Clarke, Ruscoe. Some contributions to War Surgery from U.S.S.R. *Ibid.*, 372.

Cameron, H. C. Fifty years' progress in Pædiatrics. *Clin. J.*, 1941, **70**, 225.

Ryle, J. A. Nosophobia. *Ibid.*, 235.

Worster-Drought, C., and Others. The surgical treatment of syringomyelia. *Brit. J. Surg.*, 1941, **29**, 56.

Humby, Graham. A one-stage operation for Hypospadias. *Ibid.*, 84.

Thompson, R. H. S., and Another. A procedure for the treatment of gas casualties. *Brit. Med. J.*, 1941, ii, 448.

Reading, Philip. Mucocele of the pharyngeal ventricle simulating a laryngocele. *J. Laryngol. Otol.*, 1941, **56**, 204.

Changes of Address

G. F. Daws, Captain A.D. Corps, 19, Knottingly Road, Pontefract.

H. L. Eason, C.B., C.M.G., M.D., Newbridge Mill, Colemans Hatch, Sussex (Tel. : Colemans Hatch 45).

J. Fawcett, M.D., Ruthin Castle Clinic, Denbighshire, North Wales.

J. B. Gregor, Wing Commander R.A.F., Officers' Mess, Cranwell, Lincs.

B. Lawson, M.R.C.S., L.R.C.P., R.S.O., Guest Hospital, Dudley, Worcs.

C. F. Morrison, Major R.A.M.C., Officers' Mess Woolwich, S.E.18.

J. R. D. Williams, Lieut. R.A.M.C., 335 H.A.A. Bty. R.A., c/o G.P.O.

Corrigendum

F. J. R. Stoneham, Flying Officer R.A.F. (V.R), *not* Flight Lieut., R.A.F. Hospital, Wroughton, near Swindon, Wilts.

Prisoners of War

R. D. Campbell Hart, Lieut. R.N.

Births

PUGH-JONES.—On September 15th, 1941, at the Grove Nursing Home, Isleworth, Middlesex, to Vera M. Pugh-Jones (née Cole), wife of E. Pugh-Jones—a daughter.

Marriages

BOWEN-JONES—CORBETT.—On September 14th, 1941, at St. James's, Croxteth, Liverpool, J. A. Bowen-Jones, Surgeon-Lieut. R.N.V.R., to Eileen Ann Corbett.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry

and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV 18 *th October* 1941 *Number* 1389

PASSIM

THE dispersal of the Medical School to Tunbridge Wells and of the students in the clinical period throughout the Sector hospitals has inevitably produced a sense of aloofness from the mother hospital. This feeling of "not belonging" must naturally be most marked amongst those in the pre-clinical period, many of the newer generations of whom will have never worked at Guy's itself and have no present prospect of doing so until they have reached well into their clinical studies. Under these circumstances the part played by the Clubs' Union and kindred student societies in fostering the unity of the Hospital has become all the more important than in peace time. In spite of war-time restrictions upon travelling and the difficulties of dispersal upon the raising of representative sides and in the arranging of fixture-lists, the Hospital is maintaining its high standard in the different sports and athletics, whilst, in a more intellectual sphere, the Physiological Society and the Physical Society have taken on a new lease of life.

◆

THE recent rather premature announcement in the daily Press upon the subject of hospital organisation after this war, coupled with the present correspondence in a current medical journal upon the advantages possessed by the voluntary as compared with the county council hospital, seems to suggest that, although the State medicine controversy is temporarily out of fashion, planning for the future still occupies the attention of a great many medical minds. It is, of course, both important and valuable that this should be so, but the near future is, however, for the moment even more important than the distant future. The experience gained during the air-raids of last winter gave valuable opportunity, not only for the evaluation of modern methods of traumatic surgery, but also for the future organisation of our hospitals throughout the country should such raids be repeated. It is also to be hoped that all effort is being made to learn every possible lesson, not only from our own experience, but also from the present Russian campaign, in order that the organisation of the medical services throughout the country may be prepared to anticipate all of the possibilities which modern warfare may force upon both the civilian and the service population of this island.

◆

THE current number of the Guy's Hospital Reports is a special number to commemorate the centenary of the death of Sir Astley Paston Cooper. This number, which is reviewed elsewhere in these pages, contains, in addition to articles dealing with arterial disease and surgery, an account of the life of Sir Astley Cooper and of his contributions to surgery. By way of contrast, a member of the Honorary Dental Staff has contributed the following short note upon another aspect of Sir Astley's life :—

" It is not generally known that Astley Cooper had a large part in establishing the course of lectures in Dental Surgery at Guy's. The story is told in the third edition of the lectures of Joseph Fox, published in 1833 and is as follows :—' It appears that during the time the Author was engaged as a dresser with Mr. Cline, he found amongst the pupils of St. Thomas's and Guy's Hospitals a great desire to obtain particular information concerning the diseases of the teeth. Frequent conversation on these subjects, and descriptions of the modes of performing some operations, led to the delivery of a Course of Lectures on the Structure and Diseases of the Teeth. In this undertaking, much assistance was rendered by Mr. (now Sir Astley) Cooper. The first Course was given in the Spring of 1799, after which they were continued as one of the Spring

Courses of Lectures delivered at Guy's Hospital.' These lectures have been systematically given ever since and are the oldest course of lectures in dental surgery at a recognised teaching school anywhere in the world. Many will also remember the story of his kindness to John Keats, the poet, who entered Guy's as a student in October, 1815. He was attached to the firm of a surgeon who was dull and unimaginative as a teacher. Like many others Keats also attended the rounds of Astley Cooper, who soon noticed the short, auburn-haired student with the eager face. When Cooper found that Keats was an orphan and lonely he arranged that he should share lodgings in St. Thomas's Street with his own nephew and another student. It was in this room and as a result of conversation among Guy's students that the famous lines commencing 'A thing of beauty is a joy for ever' were written. Joseph Fox was also a remarkable man. His lectures contain, among many other things, a full account of the method of orthodontic treatment, by an arch and ligatures, which a hundred years later was taken up and developed by Edward Angle. Fox had a distinguished practice. Among his patients were two sons of King George III—the Duke of Sussex and the Duke of Kent, father of Queen Victoria. The Duke of Kent, writing of Fox after his death in 1816, said that His Royal Highness 'felt the loss of that excellent man most deeply, whether he be considered as a private friend or as a public philanthropist.'"

To conclude upon an historical note, the disappearance of the statue of Thomas Guy under a substantial edifice of brick and cement, for its better protection in the future, has disappointed many who were pleased to welcome his reappearance a short while ago. Although the decision to adopt this procedure was probably adopted only after careful consideration of all the alternative means of ensuring the safety of the statue, an anonymous contributor would like to suggest that Thomas Guy himself might have had other views on the matter:

Oh, Thomas Guy, you ask me why
In brick they've now encased you?
Better than rotting bags and sand
Which only part embraced you.
"But am I doomed," the old man asked,
"In summer and in winter,
To stand alone a trifle damp,
Protected thus from splinter?
I am no saint, a deal in shares
Or company promotion
Is what I liked; and now I learn
That friends across the ocean
Have made it possible to start
Guy's U.S.A.; it warms my heart.
So, Gentlemen, here's my request:
I will withstand the shaking,
Take me forthwith to Sevenoaks,
For here my heart is breaking."

D. X. T.

The Use of Sulphonamides in General Medicine

By A. H. Douthwaite, M.D.

THE enthusiasm that hailed the advent of sulphapyridine (M. & B. 693; Dagenan) has led to a widespread disregard of earlier members of the sulphonamide group. Such inconstancy is not wholly justifiable, for sulphanilamide (Prontosil album, Streptocide, etc.) and its benzyl derivatives Soluseptasine and Proseptasine seem to be equally efficacious in dealing with acute streptococcal infections and have the advantage over sulphapyridine in rarely producing nausea, vomiting, or deep mental depression.

Streptococcal Diseases.—Probably acute follicular tonsillitis is the commonest streptococcal disease met by the general practitioner, whilst its later effects are seen by the consultant. Headache, high temperature, rapid pulse, tonsillar exudate and enlarged tonsillar glands usually indicate infection with hæmolytic streptococci. Before the arrival of Prontosil I used to see every winter from eight to a dozen cases of streptococcal fever following such an onset. Swinging temperature, leucocytosis, sweating, rigors, splenic enlargement, sometimes diarrhœa, and often a positive blood culture presented the clinical picture. Recovery in two to three weeks was the rule. Since 1936 I have seen but two further instances of this spread of streptococcal infection. The reduction must be attributed to and justify the routine use of sulphanilamide for acute sore throat. Streptococcal meningitis, preceded or not by otitis media, has likewise disappeared from my diagnostic records and, no doubt, our surgical colleagues have noticed similar reduction in the number of cases of erysipelas, lymphangitis, and septicæmia following infected wounds. The reduction of morbidity-period throughout the community must be enormous.

Dosage.—No matter what sulphonamide is used the essential in treatment is to give a large initial dose followed by smaller doses at regular intervals, usually four-hourly. Sleep should not be allowed to interfere with the administration. The absorption rate and diffusibility of sulphanilamide and Proseptasine are greater than those of sulphapyridine and sulphathiazole. This accounts for the fact that the dosage of the first-named is rather lower than that of the more recent drugs. For instance, for acute streptococcal tonsillitis the initial dose should be two tablets (1 g.) for an adult followed by two tablets every four hours for the first twenty-four hours. This gives a dose of 6 grammes for the first day. By this time the temperature will have fallen by crisis and the throat will already be less sore. Five grammes in divided doses should be given on the second day day and 3 grammes on the third and fourth days, even though the temperature be normal.

Influenzal Pneumonia.—There is no justification for the giving of any sulphonamide to victims of the common cold or of uncomplicated influenza. If we study reports to the contrary we never fail to find that the length of the disease was well within the normal limits of the untreated malady. On the other hand, both diseases are liable to develop complications due to the activity of secondary invaders—frequently streptococci or pneumococci. It is then that the use of sulphanilamide or of sulphapyridine, according to the organism, is justified. Should influenza be complicated by pneumonia would the use of a sulphonamide be indicated? In theory the answer is clear—the employment of the drug should depend on the bacteriology of the sputum. Thus, although a mixed flora is certain, yet a preponderance of β-hæmolytic streptococci would call for full doses of sulphanilamide or of Proseptasine. If pneumococci preponderate, or if the sputum contain both organisms, then sulphapyridine must be given. If, on the other hand, the Pfeiffer's bacillus, non-hæmolytic streptococci and *M. catarrhalis* form the bacterial content of the sputum sulphonamides should be withheld. It is obvious that in practice this advice cannot be followed without loss of time which might be decisive in jeopardising recovery. In the absence of knowledge of the infecting agent sulphapyridine should be given in an initial dose of 1½ g. with a maximum total for the first twenty-four hours of 8 g. In the meantime bacteriological examination of the sputum can be undertaken. All the sulphonamides act promptly if they are to produce benefit. If no improvement be observed in twenty-four hours it may be assumed that such treatment is wrong and should be discontinued. The only objection to these steps is that nausea and vomiting will occur in at least 20 per cent. of subjects. This tendency can be reduced by giving the powdered drug suspended in tragacanth emulsion, or in milk, and by reducing the irritability of the vomiting centre by the administration of 10 minims of Tr. opii half-an-hour before the first large dose. If, on the other hand, the temperature begins to fall, sulphapyridine should be continued, giving 6 g. for one day, then 4 g. daily for three days and, finally, 2 g. for two days. As soon as it is known that the pneumonia is streptococcal in origin sulphapyridine should be replaced by sulphanilamide. Should empyema develop in the course of such a disease, it is unlikely that complete recovery will follow chemotherapy only. One then sees the temperature rise within a day or two of discontinuing the drug and, although it may be depressed by further sulphanilamide, the effusion will become thicker and need evacuation. Many exceptions to this have been reported. Thus in 1935 I treated a man suffering from broncho-pneumonia with profusion of hæmolytic streptococci in the sputum. On the fifth day of the disease a turbid effusion developed at the left base. This also contained streptococci. Prontosil was given on the eighth and subsequent days for a week, the dosage being 5 c.cm. by intramuscular injection and two tablets thrice daily by mouth. On the second day of treatment the temperature and pulse were lower and fell progressively to normal by the sixth day of treatment. The effusion was absorbed in four days. Cyanosis towards the end of treatment, which was continued for twelve days, accompanied the orange discoloration of the skin which often resulted from the original Prontosil. The paradox of a recovering patient becoming blue was at the time inexplicable, but must clearly have been referable to methæmoglobinæmia.

Pyelitis. Early in the history of the sulphonamides *Bacillus coli* pyelitis was found to respond well to sulphanilamide treatment. It seems to be agreed, however, that sulphapyridine is the more effective drug here. For the acute stage of pyelitis there is still much to be said in favour of treatment with potassium citrate and sodium bicarbonate. Large, evenly-spaced does sufficient to render the urine strongly alkaline cause a rapid disappearance of pain, fever and pyrexia. A follow-up with a sulphonamide reduces the danger of relapse.

Pneumococcal Diseases.—Though possibly to be superseded by yet more modern sulphonamides, sulphapyridine (M. & B. 693) holds pride of place in the treatment of pneumococcal pneumonia. An initial dose of 1½ g. is followed by divided doses, giving a total for the day of 8 g. If the usual rapid response to treatment is obtained the quantity of drug should be tailed off, giving 6 g. on the second day, 4 g. on the third, fourth and fifth day, and 2 g. on the next two days. The temperature will often be normal on these last three days, but it is wiser to overdose than to be too sparing with the drug lest a recrudescence of the pneumonic process occur. Such a relapse may prove more resistant to sulphapyridine and should be dealt with by reverting to the original high dosage. Especially in old people is a relapse apt to arise even though sulphonamide therapy has been generous. Vomiting may seriously impede the execution of treatment. Recourse must then be had to the injection of the sodium derivative (Dagenan soluble). The contents of am ampoule contain 1 g. of sodium sulphapyridine, but the more rapid absorption from the site of injection will counterbalance the lower dosage in relation to that used for oral administration. The solution is highly alkaline and thus very irritating. Care must be taken to avoid sloughing or abscess formation. With this object the solution should be injected deeply into muscle, preferably the gluteal region, some air must be in the syringe so that it clears the needle when the piston is plunged home, and rotatory deep massage for a few minutes should be given around the site of injection. In the meantime opium should be given as recommended earlier with a view to resuming oral administration as soon as possible. Records from consulting practice show again how great has been the benefit conferred by sulphapyridine. Lobar pneumonia and empyema used to be some of the commonest ailments to provoke consultation. Now they are a rarity.

Pneumococcal meningitis requires full doses for the first three days, for the concentration of M. & B. 693 in the C.S.F. is only about one-third of that in the blood (in the case of sulphanilamide it is about one-half) and fluctuates considerably.

Meningococcal Meningitis.—Since 1936 sulphonamides have been used with varying success in the treatment of this disease. Many initial failures were due to inadequate dosage. The original Prontosil and sulphanilamide are both highly potent in combating the infection, but Proseptasine and Soluseptasine are not. Weight for weight sulphanilamide is less active than sulphapyridine. On the other hand, the concentration of the former drug in the C.S.F. is higher, reaching 5 mg. per 100 c.c. in the first twenty-four hours and 11 to 12 mg. per 100 c.c. in the second twenty-four hours in full dosage. M. & B. 693 seldom rises above 3 to 5 mg. yet may be very effective even in lower concentration, whilst a fall below 5 mg. of sulphanilamide is dangerous (Banks, 1939). The effect of sulphanilamide on the recovery rate and the importance of adequate dosage is demonstrated by Banks' series (1938). Of thirty-eight cases treated with serum alone 16 per cent. died. Of fifty-nine cases treated with serum (120 c.c i.v. daily for two days) and sulphanilamide (maximum daily dose 10 g.) 11.8 per cent. died. When the importance of full and prolonged dosage was recognised he treated sixteen cases with sulphanilamide alone and 6 per cent. died. The scheme this author recommends is as follows :—

	AGE-GROUP.				
	Under 2.	2–5 yrs.	5–10 yrs.	10–15 yrs.	Over 15 yrs.
Daily dose in grammes,	3	4.5	6	7·5	9

The first or loading dose should be higher than those which follow, *e.g.*, ¼ g. higher for a child and ½ g. higher for an adult. The drug should be given four-hourly for three days and then in two-thirds the amount for two days and, finally, one-third for two days. Banks (1940) stated that in the treatment of cerebro-spinal fever M. & B.693 is the drug of choice (but see sulphathiazole), but if it causes vomiting twice, nausea, depression, and hæmaturia neither it nor the sodium salt should be used. Change must be made to sulphanilamide.

In very acute cases where M. & B. 693 cannot be given by mouth, or by nasal catheter passed into stomach, the sodium salt may be administered intravenously, 2 g. diluted three times with saline.

It must again be stressed that doses of 6 g. daily of sulphapyridine, whilst often fully effective in the treatment of pneumonia, are dangerously low for tackling meningitis. After two and a half days of such treatment Banks (1941) found meningococci still present in the C.S.F.

Even with the greatest care it may be impossible to avoid complete deafness which may result from this disease. I have seen it twice in fulminant cases where heroic dosage was used early and repeatedly. The tendency to relapse is great. A patient saved miraculously from the disease may, after two or three days of apparent good health, suddenly become pyrexial again and fall into stupor. In one remarkable instance I saw such a relapse heralded by an ascending myelitis which within twenty-four hours had spread to paralyse the lower intercostal muscles. Immediate heavy administration of sulphapyridine checked the disease in the nick of time and full recovery occurred.

Impressive results have been obtained from the use of sulphathiazole in the treatment of meningococcal meningitis. Banks (1941) considers that it is certainly superior to the other drugs we have considered. In the post-epidemic period of 1940 he treated ninety-six persons with a fatality rate of only 2.1 per cent. This compared with sulphanilamide or sulphapyridine-treated sporadic cases in 1938–39 with a mortality rate of 6.25 per cent., and 9 per cent. in similarly treated patients in the 1940 (January to May) epidemic.

The dosage is the same as that already quoted in relation to age-groups. Thus the total dose for an adult will be about 50 grammes. The drug has the great advantage of being practically non-toxic, very rarely producing nausea, vomiting or depression, and seldom cyanosis. I have not seen reports of its causing urinary calculi in human beings, but the experimental evidence quoted by Dr. Mutch should put us on our guard in this respect. The blood concentration does not rise above 6–7 mg. per 100 c.c. because of absorption and excretion being quicker than that of sulphapyridine. The concentration curve in the C.S.F. does not follow that of the blood, but flattens out at 1.5 mg., seldom rising to 3 mg. per 100 c.c.

Staphylococcal Infections.—Various reports from the U.S.A. record the cure of *Staph. aureus* septicæmia by the use of sulphathiazole and sulphamethyl-thiazole, but there is not the same unamity of favourable opinion as was quickly reached in relation to sulphanilamide for streptococcal infections. In this country reports have not on the whole been encouraging. So often the term septicæmia is used for what is better described as bacteriæmia. Thus staphylococcal fever, which may present a positive blood culture, has a naturally high recovery rate. The most that can be said at present is that sulphathiazole, and for that matter sulphapyridine, tend to produce benefit if given in full doses in acute staphylococcal infection. I have seen an apparently moribund man with staphylococcal septicæmia and osteomyelitis of a vertebra seemingly recover in twenty-four hours after starting treatment with sulphapyridine. The temperature and pulse fell to normal and the general condition completely changed in this time, but the local lesion failed to respond. After three days of no sulphonamide therapy the constitutional reaction was again evident and yet again responded to more M. & B. 693. In this way staphylococcal infections answer to treatment rather as does bacterial endocarditis due to the *Str. viridans*. A fall of temperature and negative blood culture may be procured by sulphapyridine, but the disease persists.

Doubt must still exist of the efficacy of the sulphonamides in the treatment of abortus and Malta fever, though many encouraging reports have favoured sulphapyridine for these illnesses.

REFERENCES

Banks, H. S. (1938) *Lancet*, 2, 7.
Do. (1939) *Ibid.*, 2, 921.
Do. (1940) *Proc. R. Soc. Med.*, 33, 555.
Do. (1941) *Lancet*, 1, 104.

Sector News

Guy's Letter

THE Hospital has been quite busy during the past few weeks, a welcome ending to a summer that, with the exception of certain departments which have been active the whole time, has been rather dull. Of course, we expected this, for any C.C.S. is dull between the periods of bewildering activity. The surgeons, particularly, have appreciated it, for they were tiring of the triple union of burns, fingers and lacerations. The Out-patients, which provides us with a constant supply of good clinical material, has almost assumed peace-time proportions.

We now have many signs that the " season of mists " is approaching, though there is little evidence of the " mellow fruitfulness " here. We have done our best. Kitchen gardens have sprung up on several parts of this ancient soil, but its vitality is poor and results disappointing. Physicians have advised Mist. Stim. t.d.s. in desperation; but, perhaps, it is U.V.L. that we need. We have not tried mushrooms yet, and these might well grow in parts of the dug-outs. However, though little of an edible nature has been grown, Miss Addiscott has excelled herself with the gardens covering the shelters. The beds have been flowering throughout the summer, and sunflowers and marigolds now give them a bright finish.

A fire lit up the black-out the other night. It had been started by the workmen in a pile of *debris*. We tried extinguishers and then the fire-party, but both had vanished. We then tried to find the man who knew the place to find the key that fitted the lock to open the lid which secured the box where lived the tap that fitted the hydrant. And when we did—no water ran! The fire was out in fifty-five minutes. We understand that this situation may be alleviated when the foundations of the ruins in the quadrangle are converted into a reservoir.

The Dance went off well in spite of an early crisis, when the possibility of an evening without music was imminent, as the band failed to arrive. Whether this was due to the honeymoon of its leader, Bill Trethowen, we cannot say. We are grateful to Mr. Finnigan and Ronchetti for arranging this evening, and hope that it is only a prelude to a season of dances, which will relieve the monotony of the winter evenings—*Blitzkrieg volens!*

A certain honorary was asked to take part in an immediate operation on a lacerated child, just run over by a lorry. " Most willingly. I could have managed it if only you had asked me yesterday," was the reply. Oh, for the blessed gift of prophecy!

We are frequently honoured with visitors, both from the Services and from the Sector Hospitals, and we would like to take this opportunity of saying how pleased we are to see them. We always welcome these visits. At present our hospitality is limited, though we soon may have a Residents' Sitting Room in Nuffield—but, until then, many a goodly evening can be had at the old tavern in the High Street.

C. F. H.

Pembury Letter

FOR some months now periodical combined rounds have been held in the Lecture Theatre, at which the medical and surgical firms have taken it in turn to show cases and invite comment from their colleagues. The advantage of collecting the pearls of wisdom which are cast in such profusion on these occasions, while sitting in comparative comfort and being able to see both the speaker and his subject must be much appreciated by those who are used to being propelled round the wards in the midst of that tidal wave of human flesh that constitutes a popular surgical round.

It is with much regret that the Hospital has just said good-bye to its Matron, Miss Wheeler, whose good humour and broadmindedness had earned her both popularity and respect. Her departure was made the occasion for a dance, and a few days later a representative gathering was present in the Nurses' Home, when a presentation was made to her on behalf of all the Staffs of the Hospital as a token of the esteem in which they held her.

One night recently a full moon looked down on an open space in Pembury and was surprised to see a number of couples dancing on the sward to the strains of a piano accordion. After a time they sank to the ground, where they were well fed and watered before the dancing restarted, and only stopped as the hour approached midnight. The organisers of this party must be congratulated on their originality and success.

We hear that the county laboratory has recently been unable to carry out certain investigations owing to the lack of members of the rodent world. We would therefore cordially invite a visit from those concerned to replenish their stocks from the fine stud we have here. There is a flourishing colony of mice in the residents' flat and, while their pedigree cannot be guaranteed, they are said never to talk " shop " at meal-time. The rats in the rubbish dump by the nurses' huts are also said to be well bred, and only absolute outsider rats have been seen beyond the notices, " Nurses only." This, however, may be because they find the huts too damp.

G. L. L. R.

Farnborough Letter

THE Out-patient department of a hospital exercises a regulatory control over both the discharges from and the admissions to the wards ; the absence of such a department leads, on the one hand, to inadequate following-up of cases with possibly unsatisfactory after-treatment, and, on the other hand, to a certain number of unnecessary admissions and possibly failure to admit some cases in urgent need of treatment. On the discharge side the lack of follow-up facilities adds to the difficulties of the Hospital Staff and the lack of after-treatment at the Hospital may delay or impair the patient's recovery and will probably throw a good deal of extra work on the outside doctor who has to take the case over. On the admission side, an unnecessary admission involves the Hospital in needless expenditure of money and of time and trouble on the part of its Staff, puts the patient to avoidable inconvenience and may involve him also in financial loss. So far as the outside doctor is concerned he may be compelled to advise hospitalisation simply because he cannot otherwise have the patient properly investigated or else he may hesitate to advise hospitalisation in a particular case where he would readily suggest an out-patient consultation and, in consequence of this hesitation, diagnosis may be delayed and possibly treatment thereby prejudiced. It would thus appear that an out-patient department should prove a boon to all parties concerned.

Such musings may seem to be more appropriate to " Passim " than to a " Sector News " letter, but they have a local application. At Farnborough, until recently, there had been no out-patient department; there still is no " department " in the administrative or geographical sense, but there are certainly out-patients in quite goodly numbers. The pioneer in this connection was our irrepressible psychiatrist, whose invasive tendencies are well known. From a very modest beginning the attendance at the psychiatric clinic has so mounted that now both Dr. Felix Brown and Dr. Wakeham are kept busy dispensing uplifting advice until well after their appointed lunch-time every Thursday.

Similarly, Dr. Forman's Saturday session has developed from a small nucleus of Service patients seen at the beginning of a ward round into a regular Mecca for sufferers from all kinds of pimples and spots; the complete armamentarium of a particularly versatile dermatologist is at their service and all forms of treatment, ranging from radical surgery through radiotherapy to the subtlest blandishments of psychotherapy are liberally employed. We have not yet heard of a

Farnborough maiden marrying a millionaire as a result of treatment at skin O.P.'s, but we are hoping that such an event may result in a substantial benefaction to the Hospital.

Mr. Hamilton's gynæcological session—established much more recently—is rapidly attaining quite formidable proportions, and the ante-natal clinic, which has, of course, lead a crowded existence since pre-War days, is even more crowded. It is said that many of the local Canadians are getting married.

Embryo surgical and oval medical services are also in being and may be expected to blossom forth when suitable conditions arise. The rapid increase in attendance which followed these various out-patient enterprises must be taken as evidence that a need is being met. V. C.

Orpington Letter

"MASSAGE and exercises, please" is a phrase so frequently used as to become a byword.

There are, however, many who by chance have little knowledge of the work done by the Massage Department in the Sector.

Orpington is one of their strongholds and we are thus privileged to see them at work when e'er we will.

The inner sanctum is situated in Hunt Ward, where they carry out manœuvres which to the uninitiated bear a close resemblance to mediæval tortures and rituals.

The plunging of the bared hand into molten wax reminds one of the old trial by ordeal; whilst the scourging on the back of upturned victims suggests the Flagellants of the thirteenth century.

Be all this as it may, the results of their administrations justify the method and in spite of the awful spectacle of limbs being twisted into weird shapes, their followers are legion and like it.

Their contemporaries, the Light Department, are no less active and they have obtained many converts who were at first sceptical of the powers of the healing rays.

The co-operation of these departments in medicine and surgery has done much to assist in the patients' recovery.

Orpington is indeed fortunate in having both so well represented. G. T. H.

Sherwood Park Letter

THE soothing personality of Mr. Drew is missed by all in the Dissecting Rooms. We wish him good luck and a safe return from his newest adventure. In his place we welcome Mr. Gillman, and hope that he will not be overworked.

Strange things have been reported from the Chemistry Laboratory, where it appears that a certain chemist sleeps soundly under the soporific effects of Bunsens and hardware. It is gallant of him to undergo such privation in the cause of medicine, and we are sure that all those who have the benefits of his powers of oratory appreciate his self-sacrifice.

The Home Guard is flourishing—sometimes we feel a bit too well—and the officers look very smart, but we all feel that our uniforms make better decorations when inside a wardrobe.

D. P. N.

The Wildernesse Letter

THE play of colour among the trees and their falling leaves are the sign that mortification and decay are upon us. Inside the Hospital it has been the same; for a while both the house officers are in bed, and Mr. Hutchinson has had to be brought from Orpington to take their place. Now he has to go back, and we hear that Mr. Sechiarri is coming in his stead. From our bedrooms we extend a warm welcome to him.

When womenfolk predominate you'll always find that they dictate, so there's one thing I'd like to stress to those who come to Wildernesse. You can get anything that's right if you keep on from morn till night. They'll put you off, obstruct and thwart; each bright idea they'll bring to naught, but just tell everyone you meet success' secret is "Repeat!" One day the boss is sure to hear, and once you have the boss' ear you just tell him about the mess—and roses bloom in Wildernesse.

A man walked into one of the wards recently; he looked the H.S. up and down. "Are you some strange bird from America?" he asked. The H.S. knew the man by ear. He wondered if the anatomy of the middle ear cleft in American birds was of peculiar interest to this man that such notice should be taken of himself. "No, sir," he replied.

D. M. J.

The Clubs Union

GUY'S HOSPITAL CLUBS' UNION.

THE Clubs' Union was constituted in the Summer of 1891 by the amalgamation of the various student clubs and societies then existing at the Hospital.

The objects were to further the interests of each club by mutual support and to simplify the collection of subscriptions.

By the payment of an annual subscription to the Clubs' Union any student of the Hospital is entitled to the privileges of membership of any of the constituent institutions; whereas non-members are excluded from participating in the activities of any.

Amongst the many advantages open to members was the use of the Students' Club, which provided a dining-room, reading room and smoking-room in the College at Guy's Hospital. Unfortunately these have been destroyed, but it has been possible to obtain other accommodation in the Hospital and details of this appear in a later article.

The Clubs' Union is fortunate in possessing an excellent fifteen-acre ground within easy reach of the Hospital. This is situated at Honor Oak Park and, before the War, provided quarters for the Rugby and Association Football Clubs and the Cricket, Hockey and Lawn Tennis Clubs.

During the past ten years many improvements have been carried out, including the installation of an extensive drainage system, the building of a new Stand and the enlargement of the Pavilion, so that Guy's can be justly proud of having one of the best equipped grounds in the London area.

It is unfortunate that the new student who now spends his first years at Tunbridge Wells will not immediately reap the benefit of having such excellent quarters close at hand, but for those who are stationed at Guy's and Farnborough the fields at Honor Oak Park provide the best means of taking exercise whether it be a friendly game or an organised match.

By perusal of the articles that follow the student will, however, realise that adequate facilities for all kinds of sports have been made available in whatever area he may be situated. This is especially true of Tunbridge Wells, where the large number of junior men at the Medical and Dental Schools are particularly fortunate. The playing fields of the Tonbridge Rugby Club are used for Rugger, Soccer and Hockey and the Neville Ground at Tunbridge Wells for Cricket, Tennis and Athletics. These have proved excellent quarters and are deservedly popular, but the versatile student will find no lack of other games in which he may become proficient.

The affairs of the Clubs' Union are under the control of the Clubs' Union Council, which consists of six members of the Hospital Staff and student representatives from Guy's, Farnborough and Pembury Hospitals and from the Medical and Dental Schools at Tunbridge Wells.

The annual subscription to the Clubs' Union is four guineas. This includes membership of all the constituent clubs and a free copy of the *Guy's Hospital Gazette*, which is published fortnightly.

The majority of students on their entry to the Hospital realise that membership will enable them to broaden their outlook in both the athletic and educational worlds; by joining immediately and continuing as subscribing members until obtaining a qualifying degree they will become eligible for the privileges of Life Membership of the Clubs' Union.

A series of reports follow which give up-to-date information on the majority of the Clubs which are carrying on in spite of the many restrictions imposed by the War.

It is hoped that they show that the high standard of athletics which has been a tradition at Guy's for so long is still being maintained and that the Clubs' Union has made and is making strenuous efforts to further the interests of all students despite the present difficult time.

C. S. DARKE,
Hon. Secretary, Clubs' Union.

THE STUDENTS' CLUB AT GUY'S.

The regrettable destruction of the Club premises in the College at the end of 1940 has necessitated many changes at Guy's. Every effort has been made to continue to provide club facilities for members, and in this respect the courtesy and co-operation of the Dean and the Deputy Superintendent have been invaluable.

The College Catering Company has taken over the Staff Common Room in the New Pathology Block as a dining-room, and adjacent rooms have been converted to provide kitchen accommodation. Universal praise has been expressed for the manner in which Miss Robbins and the staff of the Catering Company have continued to provide excellent service in the face of grave difficulties.

The new Physics Laboratory has been converted into a reading-room and the necessary furniture provided. Newspapers and periodicals are available here as previously. Telephone facilities are available in Nuffield House, where incoming calls are taken by the porters.

About fifty members each three months are appointed to the Hospital E.M.S. Rota and these students are given board and lodging at the Hospital. Meals are taken in Nuffield House, where daily papers are available at breakfast, and sleeping quarters are provided in the Hostel. These resident students are relatively senior and with them the question of working for examinations looms large. No obstruction has been placed in the way of obtaining suitable quarters for this serious work, and many rooms in the Hospital and Medical School have been "acquired" for the purpose.

In conjunction with the Clubs' Union the student representatives have been increased from five to seven, selected from Guy's and the Sector

Hospitals. There is ample opportunity, therefore, for grievances to be aired, and every effort is made by the Committee to provide the maximum benefits for members of the Club.

S. H. WASS,
Hon. Secretary, Students' Club.

RUGBY FOOTBALL CLUB.

Arrangements for Rugby football for the coming season have been completed, and it is hoped that the fixture-list of the 1st XV will be published shortly in the *Gazette.*

With the experience of the past two seasons under war conditions, the Secretaries have been able to obtain fixtures for five teams on practically every Saturday and on a considerable number of Wednesdays, so that there should be ample opportunity for those with talent to take part in matches.

By close liaison between the Captain and the Hon. Secretary of the 1st XV and the Hon. Secretaries of the Junior Teams it will be possible for anyone who stands out in a certain team to be promoted to the team above, so that each side is kept fully representative.

The 1st XV has again to thank Mr. George Winston for arranging such an imposing list of fixtures which have quite a peace-time appearance, with fixtures against Bedford, Northampton, Oxford University, Cambridge University, Rosslyn Park, Royal Air Force, Aldershot Services, and five prominent London hospitals. The home matches will be played on the Club ground at Honor Oak Park, and it is hoped that all those who can will turn up at the ground and give their full support.

The Hospital side can look forward to a good season, for all but one of last year's team are available. M. R. Mullins is the new Captain and his excellent leadership of the pack and his place kicking will be a great asset. The new Hon. Secretary is D. M. Strathie, who should be a tower of strength at fly-half. A new centre will have to be found to replace R. U. F. Kynaston, who is now in the Army, but much is expected of P. L. Brangwin, who was in such striking form towards the close of last season. All last year's forwards are available, so that Mullins should be able to wield a formidable pack from the start.

Guy's will also be running a 2nd XV which will be drawn from students billeted at Guy's and Farnborough, and will play on the second pitch at Honor Oak Park. Details of matches and other matters will be posted in the Colonnade at the Hospital.

At Farnborough the rugger will be in the hands of A. B. Lees, who is hoping to arrange some midweek matches with local sides, including the R.A.F. A ground will be rented should these materialise. At present practice may be had on the fields at the back of the Hospital. Notices will be posted on the board in Summerland House.

The students at Pembury Hospital and Tunbridge Wells are fortunate in having two excellent pitches rented from the Tonbridge Rugby Football Club, with full use of the pavilion and dressing-rooms. P. D. Harvey is in charge of rugger in this area, and he has arranged fixtures for three XVs; all details will be found on the notice-board at Sherwood Park. It is hoped to arrange one or more trial games as soon as the Medical and Dental Schools return at the beginning of October.

The Annual General Meeting will be held this year at Sherwood Park, Tunbridge Wells, on Wednesday, October 8th, at 3 p.m. It is hoped that all new students will make a point of turning up so that they may make personal contact with the Rugby officials.

ASSOCIATION FOOTBALL CLUB.

Owing to the dispersal of students throughout the Sector, the soccer club has not received very strong support except in the Tunbridge Wells area.

Last year a pitch was rented from the Tonbridge Rugby Football Club and excellent changing-rooms were available in the pavilion. It is proposed to continue these arrangements this season, and a good fixture list has been arranged, details of which will be posted in Sherwood Park. Further support will be very welcome and any newcomers who wish to play should get in touch with the Hon. Secretary.

At Honor Oak Park there is a pitch available for practice and matches, but there has been little demand for it so far. Doubtless this is due to the considerable reduction in the number of students now posted to Guy's.

HOCKEY CLUB.

The Hockey Club has suffered as much as any from the effects of the War, although last season saw a revival at Tunbridge Wells.

Early in the War some air-raid shelters were dug in a corner of the second field at Honor Oak Park, and it is unfortunate that these encroach upon the hockey pitch. It appears, however, that the majority of those wishing to play hockey are junior students belonging to the Medical and Dental Schools in Tunbridge Wells and that no great hardship has been caused.

Last season the field adjoining Sherwood Park, whilst serving many other purposes, provided a pitch for pick-up games as well as for organised matches. Both of these proved very popular in spite of the rather rough surface, and it has been decided this year to hire a pitch at Tonbridge to bring hockey into line with rugger and soccer. This should enable a greater number of people to play, and in anticipation of a successful season a strengthened fixture list has been arranged.

All newcomers will be welcome, and those wishing to play should place their names on the notice-board in Sherwood Park or get in touch with the Hon. Secretary, Maxwell Stevens.

CRICKET CLUB.

The Cricket Club has had two very successful seasons since the outbreak of war, and last season the fixtures arranged provided many a pleasant afternoon's recreation. The fortunes of the club somewhat fluctuated owing to constant changes in the personnel of the side. It was hoped that the Guy's Cricket XI would include all the best players throughout the Sector, but owing to Tunbridge Wells running their own side and the difficulties of travel, this was not found possible. Nevertheless, several players from Tunbridge Wells made occasional appearances, and when at full strength were a formidable combination. This was proved in the match against St. Mary's, who were 126 for eight wickets at the close of play after Guy's had declared at 160 for three wickets.

During the season several United Hospitals matches were played and Guy's were represented by five players at various times.

Of the prospects for next season it is too early to comment, but it is intended to arrange a full season's fixtures. The ground at Honor Oak Park will be available for practice during the season, which, incidentally, last season, provided an excellent wicket. At Guy's the officials have always endeavoured to select the best available side regardless of the distribution of the players, and it is hoped that next season will find the club fielding its full strength.

Newcomers, wherever they may be, will be warmly welcomed, and pending the election of next season's officials any further information can be obtained from R. L. Skea, last season's captain, and C. S. Gardiner, the Hon. Secretary.

At Farnborough during the summer a number of mid-week matches were arranged, but a link-up was made with Guy's for the Saturday fixtures.

At Tunbridge Wells pitches were hired at the Neville Ground and Linden Park, and it was possible to arrange Wednesday and Saturday matches for two XIs during the summer. These arrangements appeared satisfactory, and it is proposed to continue them next year.

LAWN TENNIS CLUB.

The Lawn Tennis Club has just completed its season, but owing to irregular support and bad weather it has not been as successful as was hoped.

The first team played on the courts at Honor Oak Park. Of the ten matches that were arranged only three were played; the first against King's College Hospital, was an easy victory, the other two matches against Northwick Park and a R.A.F. side were drawn.

Although there are six grass courts and three hard courts at Honor Oak Park these were little used.

At Farnborough no organised tennis took place, but students billeted in the neighbourhood were fortunate in being allowed to use the two hard courts belonging to the Nurses' Home. Summerland House possesses its own hard court, but, unfortunately, much work would have to be carried out to make it playable, and it is doubtful whether this is justified in the present circumstances.

The Nurses at Pembury Hospital also possess a hard court and, by kind permission of the Matron, this has been made available to students throughout the summer. Mixed tournaments were arranged and proved a great success.

The Clubs' Union hired three grass courts at the Neville Cricket Club Ground, where a number of matches took place, but perusal of the booking sheets suggests that students did not patronise them to any great extent.

The Hon. Secretary hopes for better support next year and extends a hearty welcome to all newcomers. Trials will be held at the beginning of next season to discover new talent, and notice of these will appear at the appropriate time.

GOLFING SOCIETY.

For many years the Golfing Society has been a very active and flourishing society which had many fixtures with golf clubs around London, apart from the usual London Hospitals.

When the Medical and Dental Schools moved to Tunbridge Wells the old fixture list was abandoned, and for some time there was no official golf played at Guy's.

Those at Tunbridge Wells were very fortunate in having the Neville Club close at hand and in being offered membership at a reduced rate of two guineas per annum. Many students took advantage of the offer, and during the last two years various matches have been played, whilst during the summer two open competitions for Guy's Hospital students were held and each received moderate support. The first was won by J. Elder and the second by J. W. Drury.

Early in 1941 a meeting of the Golfing Society was held at Guy's, at which it was decided to arrange fixtures for the older members of the club who were resident at Guy's or Farnborough. Great difficulty was experienced in renewing old fixtures or obtaining new ones since many clubs had found it necessary to close down, but the Hospital team were successful in the three matches that were played.

In addition to the matches a golf meeting was held at West Hill open to all members of the Hospital, and this proved a great success. The winner was J. W. Drury. A second meeting, held at Moor Park late in August, was unfortunately spoilt by rain.

The Hospital is fortunate in having the services of C. S. Gardiner, who represented Oxford University on several occasions; consequently the team is considerably stronger as regards handicap than in peace-time and, although there are only two old Blues left in, S. A. Marsh and J. W. Drury, the team has yet to be beaten by another hospital.

Facilities for playing golf near Guy's are offered by the following courses :—Moor Park, Sandy Lodge, West Hill, Worplesdon, Royal Ashdown Forest, as well as at Sidcup, Beckenham and Wimbledon nearer home. Green fees of one shilling per day are charged at all these courses to Guy's students, and the secretaries of West Hill and Wimbledon Park seem delighted to welcome Guy's golfers.

Future meetings and matches are being arranged for 1942, when it is hoped that more golfers from the Sector will play. Enquiries or suggestions should be sent to the Captain, J. W. Drury, or the Hon. Secretary, D. C. Steven, who will be pleased to inform all keen golfers of the activities of the Society.

SQUASH RACQUETS CLUB

Squash is one of the most popular sports of recent years, appealing to many who do not shine in any other form of athletic activity. It is, then, singularly unfortunate that no courts are available at Tunbridge Wells, Pembury or Farnborough. The surrounding country has been toured extensively, but with no success. Every squash court that is discovered is invariably being used for storage purposes. The Clubs' Union very much regrets this state of affairs, but repeated representations to the owners have so far had disappointing results.

For those who are lucky enough to work at Guy's, the two new squash courts which have been completed since the beginning of the War are a great boon.

The Hospital team has had an outstanding season, having won all their eleven matches. The team is drawn from all parts of the Sector, and the Hon. Secretary, Dr. A. R. Shein, hopes to learn of new talent when the Schools commence in October. Anyone interested in squash should get in touch with the Captain or Secretary as soon as possible. They will be pleased to arrange trial games for those who are in the running for the team and to supply further information concerning the fixtures arranged for the coming season.

At the annual meeting the following Committee was appointed :—Chairman, Mr. J. B. Blaikley; Captain, A. Shein; Hon. Secretaries, G. Hildick-Smith, Windsor J. Lewis and Peter Maxted.

Matches arranged against Dulwich College, St. George's Hospital, St. Bartholomew's Hospital, Middlesex Hospital, Westminster Hospital, and against a team of naval gentlemen.

SAILING CLUB.

Before the War the Sailing Club was affiliated to the United Hospitals' Sailing Club, which had its headquarters at the barge *Harry*, Burnham-on-Crouch. As is the case with other sports, these admirable facilities ceased with the outbreak of war, but the Club has been fortunate in being welcomed by the London Corinthian Sailing Club at Hammersmith. Nine of the Hospital dinghies have been brought up from Burnham, and it is now possible for members to sail in their own boats on the Thames more or less when they like.

Sailing took place all last winter as well as this summer, and it is hoped that all those who are interested will get in touch with the Hon. Secretary at Guy's Hospital, who will be able to give more detailed information.

ROWING CLUB.

At Guy's and Farnborough no rowing has taken place since the beginning of the war, but students at Tunbridge Wells are more fortunate in that Tonbridge School have very kindly offered members of the Hospital the use of their boats on Wednesday and Saturday afternoons, and during the last two years many pleasant days have been spent on the river.

In the past, however, membership has been limited by the fact that the Hospital has possessed no boats of its own, and the Clubs' Union are, therefore, pleased to be able to announce that they have been able to procure two " fours " which are to be stored in the School Boat-house and will be available next season. Newcomers will be very welcome and should address their enquiries to the Hon. Secretary, H. W. Topham.

ATHLETIC CLUB.

Owing to the transfer of the athletic gear to Tunbridge Wells it has not been possible to arrange any matches or sports at Honor Oak Park since the beginning of the War.

On the other hand, all Clubs' Union members have been affiliated to the London University Tyrians' Club, whose secretary arranged a number of excellent matches throughout the summer, in which the Guy's men who took part figured prominently. The training track is at Tooting Bec, and is available at any time of the day. It is hoped that even more matches will be arranged next summer and training will begin early in May.

At Tunbridge Wells the season has been most successful. Four matches were arranged against very strong sides, and there is no doubt that there is some first-class talent in the Hospital.

The Hospital Sports, held on the Neville Cricket Ground, showed a good entry in all events, and some excellent performances were put up, especially in the 100 yards, 220 yards and the 120 yards hurdles. All those interested should get in touch with B. S. Wilson at Sherwood Park, who will be very pleased to give further advice.

HARE AND HOUNDS.

The cross-country season starts again this month and, in spite of the War, the club is carrying on again this year. The Tyrian Club has very kindly offered us the facilities of their quarters at the King's Head, Roehampton, our own headquarters at Richmond being unavailable.

There are training runs every Saturday and on most Wednesdays from the King's Head; information and fixtures will be posted on the notice-board at Guy's. Further information can be obtained from H. C. Martin or G. W. Taylor at Guy's, and all those interested are asked to give in their names to either of the above. The Club is fortunate in having a supply of running vests and shorts for anyone who has any difficulty in obtaining them in these days of rationing. The opening run will be on Saturday, October 4th, at 2.30 p.m.

At Tunbridge Wells the cross-country club had a successful season last winter, and R. Merryweather was able to arrange a number of matches in which the Guy's team gave a very good account of itself. Running takes place every Wednesday and Saturday afternoon, and all newcomers are asked to put their names on the notice-board at Sherwood Park or get in touch with B. S. Wilson, who will be able to give further information about forthcoming fixtures.

SWIMMING CLUB.

By permission of the Matron of the Hospital the swimming-bath in the Henriette Raphael Nurses' Home at Guy's is available for students on alternate days every week and on alternate Sundays. This has been used a great deal during this summer, since the old headquarters of the Club at the Lavington Street Baths, Southwark, have been damaged.

Students at Pembury Hospital and Tunbridge Wells are fortunate in being able to use the excellent open-air bath, known as the Woodsgate Pool, Pembury. It was very popular during the hot weather in the early part of this summer, and members of the Clubs' Union were able to obtain admission at half price. It is hoped that similar facilities will be granted next year.

PHYSICAL SOCIETY.

The Pupils' Physical Society was founded in 1830 as a purely Students' Society for the discussion of subjects of medical and surgical importance, for the showing of interesting cases, and for the reading of papers.

In the past meetings were held regularly throughout the winter months and each was presided over by a chairman, who was often the only qualified man present. This point is stressed because students are apt to think that the Society is designed for the benefit of qualified men and members of the Staff. In fact, the meetings are primarily intended to give students an opportunity of discussing medical problems amongst themselves.

Although these meetings lapsed for some time after the outbreak of war, they have now been resumed at Guy's, Farnborough and Pembury, and any student who desires further information about dates of meetings or who wishes to read a paper should get in touch with the Hon. Secretary at the Hospital concerned.

BOXING AND GYMNASIUM.

At Guy's the activities of the Boxing Club have been curtailed owing to the difficulty of raising a representative side for contests against other clubs. Nevertheless, last season there was such an improvement that it was possible to hold an inter-hospitals tournament in the Pavy Gymnasium. Several hospitals were represented, and it resulted in a win for Guy's, who entered seven representatives. It is expected to repeat the event during the coming season.

The Pavy Gymnasium is always available for training, not only for boxers, but all athletes who want to keep themselves fit. The ring is suitably padded and Matt Wells will be in attendance as trainer on specified days. Any further information can be obtained from Otto Halamandres, who is looking for newcomers keen on taking their place in the ring.

At Tunbridge Wells a gymnasium is hired on one night each week, and arrangements for practice and matches are under consideration.

All newcomers who are interested should place their names on the list posted on the notice-board in Sherwood Park.

THE DENTAL SOCIETY.

The Annual General Meeting of the Society was held in the Anatomy Theatre on Monday, July 14th, when the following officers were elected for the year 1941–42 :—(1) President, J. W. Mansie, L.R.C.P., M.R.C.S., L.D.S. ; (2) Hon. Secretary, H. C. Miller.

The object of the Society is to provide students of all years with regular opportunities for hearing original papers and discussing controversial topics. Despite war conditions and the rather depleted number of students up at Guy's, the Society was as successful last year as in the past, the meetings constituting an additional and interesting source of information for those attending them.

It is the intention of the present Committee to arrange a programme for the coming season which will be fully abreast of the times. To this end, apart from papers of academic and practical value by specialists in their particular fields, general discussions are to be held, and educational films relating to dentistry for the public, and to technical matter for the student will be shown. In general the policy will be to broaden the subject matter of the meetings and to avoid mere amplification of the examination syllabus.

Although for two years past the Annual Society Dance has been abandoned, strenuous efforts are being made for the re-introduction of this deservedly popular event. Given adequate respite from external hostile interference it should live up to its reputation of the best " party " of the year.

As an inducement to the shy and retiring ones with original views to air or information to impart it may be added that annual prizes of five guineas for the best paper and one guinea for the best casual communication are awarded.

Meetings will be held in the Anatomical Theatre fortnightly commencing on Monday, October 6th, at 4.30 p.m., with the Presidential Address. To this and subsequent occasions we invite all students new or old. Further notices will be posted in the Dental School.

PHYSIOLOGICAL SOCIETY.

THE Society was founded by the late Dr Pembrey in order to give students experience in preparing scientific papers, in debates, and in the running of public meetings. For this reason the entire business of the Society is conducted by a committee, secretary and treasurer, elected from the student members. The other officers—a president and vice-presidents—are elected from the Staff.

The meetings of the Society are held regularly throughout the Winter Session at Tunbridge Wells. All students are cordially invited. At each meeting a paper is read by a student on some physiological subject, and then the meeting is thrown open for discussion and questions.

During the last session the papers extended over a wide range from topical subjects such as " Vitamin C " or " Night-blindness " to the more abstruse in " A Sympathetic Centre in the Hypothalamus." Thus it will be seen that, apart from the experience gained by those who read papers, the Society affords a valuable opportunity for the discussion, which is so essential in acquiring an adequate knowledge of physiology.

R. R. B.

Reviews

Guy's Hospital Reports. Vol. 90 (Vol. 20. Fourth Series.) Nos, 2, 3 and 4. 1940–41.

THE current volume of the *Reports* is completed by the publication of Nos. 2, 3 and 4 under one cover in the form of a special number dedicated to Sir Astley Cooper in commemoration of the centenary of his death. No more fitting tribute to the great Guy's surgeon could have been found than such a number devoted as it is to a series of papers dealing with all aspects of surgical arterial disease.

The opening article is an account of Astley Cooper's life by Sir Charters Symonds, reprinted from the *Reports* of 1922. Here we are treated to a fascinating life-history and read in turn of his apprenticeship, his early work at Guy's and St. Thomas's, his appointment to the Staff of Guy's, his publications and his approach to surgery. This is followed by an article by Mr. Brock on " Astley Cooper and Arterial Surgery," a full and interesting account of Cooper's pioneer work on arterial ligation. The historical section is concluded with part of a lecture by Astley Cooper himself—" On Aneurisms "—and with an historical note on " Arteriovenous Fistula " by Professor Ryle, most suitably brought up to date by an account of such a fistula occurring in a patient, an air-raid casualty, recently operated upon at Guy's.

The remaining articles serve well to illustrate the continued interest in, and observations upon, arterial diseases by the present-day Guy's school of surgery. Mr. Davies-Colley gives an account of his well-known views on the pathology of "Cirsoid Aneurysm." Mr. Eckhoff describes the treatment carried out on a patient of his with a large cirsoid aneurysm of the chest wall, and Mr. Northfield writes an article on "Angiomatous Malformations of the Brain." Mr. Bromley describes a case of resection and anastomosis of the external iliac artery, and Mr. Slesinger a case of painful œdema in all four limbs with relief in three following ganglionectomy. Mr. Ogilvie reports a case of extracranial aneurysm of the vertebral artery, and Mr. Brock a case of innominate aneurysm treated surgically; the latter article contains also a critical review of the literature of the subject. Dr. Simpson writes on "Traumatic Rupture of the Great Vessels of the Chest following Injury to the Head," and Mr Sol Cohen on "Traumatic Arterial Spasm." "Experiences in Pulmonary Artery Ligation" by Mr. Brock represents original work in the field of thoracic surgery and brings to light interesting anatomical features not previously described. In the next article Mr. Brock gives an account of an unusual case of brachial artery embolectomy. Mr. Spalding reports a case of periarteritis nodosa and discusses the surgical significance of this disease. Drs. Hardy and Denham report a case of bilateral excision of popliteal aneurysms treated by Mr. Ogilvie and discuss the methods of assessment of the collateral circulation in such cases. In the final article Mr. Harley describes a case of popliteal aneurysm treated by Mr. Atkins and also analyses the thirty-four previous cases of this condition which have been published in the *Reports*; the article concludes with a series of abstracted notes from these previously recorded cases, dating from 1836.

This brief catalogue of the contents of the "Astley Cooper Number" gives some idea of the immense amount of material available to the reader. The individual articles are full of interest and they are of a high standard of excellence. In addition to his personal contributions Mr. Brock, as editor, must have expended a tremendous amount of care and energy on the production of this volume. That such an achievement is possible in war-time is in itself the highest of tributes to his editorship. The enthusiasm with which this special number of the *Reports* has been received at Guy's will undoubtedly be repeated the world over and its recognition as a "classic" is inevitable. S. H. W.

Copies can be obtained by non-subscribers for 20*s.* from Wills Library.

THE RECRUITS

On Thursday every week a lot
Of doctors go to Aldershot;
The Army's got them in its clutch
And means to teach them very much.

It's half-past eight on Friday morn
And all the troops with heads well shorn
Are lined up on the barrack square,
Dressed by the right in threes with care.

The Sergeant-major's just begun
To brace himself and bellow "'Shun!"
When up there stalks the Commandant
Who's followed by his Adjutant.

They make for where there stands a squad,
Which bids them fervently, "Thank God
That all the Army's not the same
As these who on the Thursday came!"

They look them up and down and see
All manner of deformity;
Kyphosis here, pot-belly there,
And every other shape that's rare.

They come from North and South and West
And East as well as all the rest;
Ther're hearties there who drink their fill
And those whose focal length is nil.

Ther're those who earned the largest fees
And quite a crowd of refugees,
And some who every week were found
Attending at Sir Arthur's round.

Of knowledge all have had a sip,
And some have got the Fellowship;
While others, too, can proudly say,
"I'm pleased to be an L.S.A."

The Colonel halts and makes a speech
To tell them what he has to teach,
Of Army forms and etiquette,
And how to make use of Debrett.

He makes it clear what drilling's for;
It is, in fact, *esprit-de-corps*.
But turn-out's more important still
And varies as the tailor's bill.

"Beware," he says, "of alcohol;
It always takes its deadly toll,
It's bad for discipline, you know,
And makes the nervous system slow."

They're told the most important thing
Is that they're soldiers of the King,
And any medicine they know
Can be forgotten ere they go.

It seems they should not play with cards,
But try to emulate the Guards,
And when the Sergeant says "Fall out!"
Not make the thing look like a rout.

Now if this seems just like a tale,
Then go to Aldershot by rail
On any Thursday if it's soon,
For war begins that afternoon.

R. T. H.

Eds. {N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *1st November 1941* *Number 1390*

PASSIM

During the last fortnight the list of house officers newly appointed, transferred and retiring, has made its appearance. To those about to assume for the first time the responsibility of patients we offer congratulations and a word of advice: no matter what the job, the amount of pleasure you will derive from it will vary directly as the amount of work put into it. We also take this opportunity of wishing the house officers that are being transferred to other points in the Sector or are retiring to take up new posts, the best of luck in their new jobs.

* * *

Following upon a summer of moderate and dry weather and because of the freedom from air-raids, the numbers of medical and surgical sick in the Sector has tended to decline to some extent. Reviewing the development of the E.M.S. scheme and the gradual changes and improvements that have come about since its inception, there can be few of its medical personnel who have real cause for dissatisfaction. There are always new details cropping up in everyone's life which may seem an insurmountable source of inconvenience; if such be the case Sector Headquarters are always willing to lend a friendly ear to such troubles and to help and advise the individual concerned.

Notwithstanding the rapid strides that have been made in satisfying the needs of the base hospital system, there still remains one obstacle which should be overcome. It is natural that with the unselected admission of all kinds of civilian sick, there is a tendency for the chronically ill and aged infirm people to accumulate in the available beds among the acute and emergency type of cases. In some ways this is a good thing for the medical officers concerned because, if nothing else, it teaches him a sense of values and a philosophy in medicine. On the other hand, it tends to dissipate his energies which might be used to advantage on the appropriate people who are still assets to their community. On the whole, it would appear advisable to segregate those cases merely requiring institutional management from those needing the amenities and treatment afforded by the general hospital.

* * *

The following is an extract from "Passim" of September 6th, 1941:—"The demolition workers at Guy's are proceeding according to plan on the Counting and Superintendent's House, but their efforts are not met without some resistance. The stout walls were built to last, and Thomas Guy, who stands unscratched in the quadrangle, must chuckle to himself again and again as he watches the modern machinery straining and struggling to dislodge what he built centuries ago. It is to be hoped that he will be satisfied when he sees what is to take its place at the end of the present conflagration." What was suggested by these remarks has been taken up in a letter by Mr. R. C. Brock, which appears elsewhere in this issue. The beautiful architecture of the Guy's buildings is part of her great tradition and historical legacy; thus Mr. Brock's plea for the preservation of everything practicable is, indeed, worthy of everyone's consideration.

The Sulphonamides in Surgery

By H. J. B. Atkins, M.Ch., M.D., F.R.C.S.

THIS symposium on the sulphonamides comes at a time when there is still much about these drugs which we require to know. A colleague of mine, better qualified than I to write on this theme, has refused on the grounds that our ideas are still too nebulous, that our " facts " may well prove fancies and that the time is not yet ripe for a considered statement. Although this is true I feel that, as the use and misuse of these substances is so widespread, the time is propitious for what we may term an interim report. In this article I shall use the word " sulphonamide" in the generic sense embracing Sulphanilamide, Sulphapyridine (M. & B. 693) and Sulphathiazole (M. & B. 670), and I shall discriminate carefully between those facts which are proven and those which are as yet only suggested or supposed.

ESTABLISHED FACTS.

The Treatment of Infection with the Hæmolytic Streptococcus.—First let us explore the solid ground of established fact. We can state categorically that the sulphonamides, taken internally by the mouth or by injection, have a controlling effect on early infections with the *hæmolytic streptococcus.* If in the future years the process of winnowing the chaff from the grain leaves us with but this solitary kernel of truth, it will suffice to establish the discovery of the sulphonamides as an epoch-marking event.

In the surgical wards we come across these streptococcal lesions as cellulitis, lymphangitis and lymphadenitis, as Ludwig's angina, (a special form of cellulitis affecting the tissues around the submaxillary salivary gland), as streptococcal arthritis and tenosynovitis. In all these conditions the administration of sulphonamides is indicated ; the introduction of this group of drugs has reduced the mortality and morbidity from such infections in a manner so striking and under circumstances so nearly that of controlled experiment that their efficacy cannot be in doubt. My own practice in treating these conditions is to give three tablets of Sulphanilamide (1½ grams) by the mouth as soon as a diagnosis has been made. Two hours later two tablets (1 gram) are given ; this dose is repeated each four hours for forty-eight hours and is then reduced to one tablet (½ gram) each four hours while the patient is awake. Medication is continued until the infection has been overcome, until signs of sulphonamide poisoning such as increasing cyanosis or vomiting appear or until a total of sixty tablets (30 grams) has been given. If the patient is vomiting (apart from the effects of an overdosage) then one of the soluble forms of sulphonamide can be given by intramuscular or intravenous injection in the same doses. I cannot believe that the demand for this measure is ever so urgent as to require injection in order to flood the circulation with sulphonamides within a few minutes.

The Treatment of Infection with other Organisms.—In much the same category of proven fact is the benefit derived from the use of sulphonamides in acute pneumococcal and meningococcal infections. But infection with these organisms, apart from pneumococcal peritonitis or arthritis, is rarely encountered in surgery, and we need not consider them further here. Infections with the *bacillus Coli communis* and the *Gonococcus* are also controlled by the sulphonamides, and it is hoped that these will be dealt with in a special article of this series.

The Prophylactic Use of Sulphonamides.—Of more particular concern in the field of general surgery is the value of these drugs used prophylactically against the *hæmolytic streptococcus.* We are here faced with the difficulty of obtaining scientific proof. The clinical course of an established streptococcal infection is fairly well known and the comparison of two relatively small series, one of cases treated with sulphonamides and the other of cases treated without, suffices to prove the virtue of these substances. It is a different matter when assessing their prophylactic value. Development of infection with the *hæmolytic streptococcus* in clean wounds is relatively rare and in potentially infected wounds is governed by so many extraneous factors, such as the amount of tissue damage, the agent which caused the damage and the time elapsing between the injury and the operation, that very large series must be compared before we can prove the efficacy of sulphonamides as prophylactic agents. While scientists, however, wait for exact proof clinicians must follow the dictates of probability and we can say that sufficient evidence has been accumulated to establish the sulphonamides on a satisfactory basis as prophylactic agents against the hæmolytic streptococcus. Their use in this connection is confined to those potentially infected wounds such as we are coming to know so well as a result of our casualty work. The method of giving the drug is the same as when it is used in the treatment of established infection but, if no signs of infection have appeared within three days, the course can be stopped.

UNSOLVED PROBLEMS

We can now turn to a consideration of other aspects of the sulphonamide group of drugs where our statements must be qualified and where further observations and investigations are necessary before we can make confident assertions.

1. It is held that sulphonamides may be of value in the prophylaxis and treatment of infections with organisms other than those enumerated above.

(*a*) *The Gas-forming Anærobes.*—Experiments on animals persuades us that the sulphonamides have a place in the prophylaxis and treatment of gas gangrene. It is thought that their value is enhanced by the simultaneous use of anti-serum, although evidence from clinical material to confirm these experimental findings is as yet lacking. In practice those cases likely to develop gas gangrene subsequently, that is those injuries resulting in extensive damage to muscle, would in any case be given sulphonamides as a prophylactic against streptococcal infection, so that this problem is of practical importance only in an established case of infection with the *gas-forming anærobes*. At present the evidence suggests that such a case should receive a full course of sulphonamides together with anti-gas gangrene serum.

(*b*) *Staphylococcal Infections.*—Sulphonilamide and Sulphapyridine are without effect in staphylococcal lesions, but there is some slender and as yet unsubstantiated evidence that Sulphathiazole may be effective. Should this claim prove valid Sulphathiazole would be indicated in such cases as osteomyelitis where there is a positive blood culture and in breast abscess when there is a tendency for recurrences and extensions to prolong the illness. Here is a field for clinical research which would be of the greatest value.

2. *Selective Action.*—We have referred above to the observations that Sulphanilamide and Sulphapyridine are inactive against the *staphylococcus* whereas there is some evidence that Sulphathiazole may be effective. This finding was at first thought to be explained by a selective action of these drugs, but it is more probably a question of potency. Experimentally Sulphathiazole is the most active bacteriostatic agent of the three when tested against those organisms known to be affected by the sulphonamides. It is probable that its effect, if any, on the *staphylococcus* is due to this extreme potency which renders it active against so resistant an organism.

3. *Subacute and Chronic Infections.*—Are the sulphonamides of value in the treatment of infections which have progressed to suppuration; in subacute or chronic infections?

(*a*) In vitro experiments show that the activity of the sulphonamides is seriously impaired if not abolished by the presence of pus, and there is no reliable clinical evidence to the contrary. This is not to say, however, that the sulphonamides necessarily have no place in the treatment of an infective condition in which pus has formed. The localised abscess may represent a pocket of resistance where a " suicide squad " of leucocytes is fighting a heroic and successful engagement surrounded by an enemy which is elsewhere infiltrating and advancing. The sulphonamides may do little to influence the fate of the Tobruk or Odessa, but might be the decisive factor in the major campaign. Such a conception, if substantiated, would bring us back to our original standpoint that the sulphonamides are of value in an acute infection. The presence or absence of an abscess in conjunction with this infection would not influence our treatment, nor would our treatment influence the abscess. Thus a localised abscess is no indication for the use of sulphonamides, but is an indication for surgery. Whether sulphonamides encourage the localisation of an abscess is a very important consideration, especially from the point of view of such peritoneal infections as pelvic and subphrenic collections. At present we are completely in the dark as to the value of this group of drugs in these cases. The theoretical possibilities are two-fold. In the first place the sulphonamides might diminish the toxæmia from a peritonitis and encourage localisation; or they might, on the other hand, mask the physical signs without corresponding benefit, and so delay appropriate surgical measures until dangerous extension had taken place. The doctor who prescribes sulphonamides in peritonitis, pelvic abscess or subphrenic abscess assumes, therefore, a great responsibility and should do so only if he is aware of the dangers involved and is prepared to make detailed observations on the case both for the patient's sake, to detect a spreading but unheralded abscess, and in order that our knowledge of the effect of these drugs on peritoneal infection may be enlarged.

(*b*) There is no evidence that sulphonamides prescribed in the manner suggested above have any effect on the course of subacute or chronic infections. Whether the concentration of the drug required in these cases is insufficient to have any effect if taken by the mouth or whether the chemistry of the tissue reactions is inimical to their action at this stage is still unknown.

4. *Local Application.*—We now come to the most important of the conjectural aspects of sulphonamide therapy—the value of local appli-

cation. It will be appreciated at once how important this is from the point of view of the surgical use of these drugs. If local application is proved to be of value, and the reports are becoming increasingly favourable both from the laboratory and from the bedside, then in the field of surgery this method will very largely supersede that of internal administration. If these drugs are active locally it means that a high concentration can be obtained just where it is wanted with a minimal flooding of the circulation; so that cyanosis, vomiting, agranulocytosis and other evidences of toxic effects of the drug will be less common. It must be emphasised that the local use of the sulphonamides will never replace surgery and that the careful débridement and toilet of an infected wound cannot be dispensed with. On the other hand, it may assist the tissues to control such small foci of infection as have been left behind and will render the granulations clean and free from virulent pathogenic organisms.

Already the value of sulphonamides locally is suggested by the increased number of successful " takes " when Thiersch grafts are applied to granulations dusted with sulphonamide powder. If this finding is substantiated it will point to the possibility of controlling chronic or suppurating infections by the local application of sulphonamide, a property which cannot be satisfactorily demonstrated when these drugs are taken internally. This is probably due to the fact that chronic and suppurating infections require a much higher concentration which can only be obtained by contact therapy.

Sulphonamides may be applied directly in the form of a powder, sprinkled or insufflated on to the wound; they may be made into an ointment with vaseline; a paste with glycerine or a solution with saline. It is not yet possible to say which of these methods will eventually prove the most satisfactory and each may have its value in different circumstances. Although the subject of local application has been put under the general heading of " Unsolved Problems," there is one fact in regard to it that has been proved and that is that the presence of the drug in a wound does no harm. It carried with it no noxious impurity, chemical or bacteriological, and it exerts no inhibitory effect on the natural tissue reactions of defence and repair.

CONTRA-INDICATIONS.

I should like to re-emphasise Professor Ryle's warning that drugs of the sulphonamide group should, with very few exceptions, be withheld until a definite diagnosis has been made. In his article he cited a case where the greatest confusion arose from ignoring this rule. Lately a case came under my care where it was necessary to differentiate between a tuberculous and a " B.C.C." infection of the epididymis. The differential diagnosis often depends on the recovery of B.C.C. from the urine; a negative bacteriological report suggesting tuberculosis. In this particular case sulphonamide had been given and the urine was sterile. Was this due to the sulphonamides or were we dealing with a tuberculous epididymitis? Fortunately only small doses of sulphonamide had been prescribed for a short time and a twenty-four hour specimen eventually revealed the presence of B.C.C., so that the diagnosis was made clear.

Lastly, it is common knowledge that aspirin, sulphur-containing compounds of the " salts " type and eggs should be withheld during a course of sulphonamide therapy, but it is not so widely realised that a patient undergoing such a course should not be exposed to direct sunlight and artificial sunlight should never be prescribed, otherwise severe skin reactions may follow.

Sector News

Guy's Letter

THE gates of Guy's are locked at night. The curfew goes at 10.30 p.m., and, after that, the Hospital is closed to all who fail to pass the porters. This has, apparently, become a necessity to prevent certain unwelcome, extra-hospital characters using the students' hostel as a free residence for the night; also, we hear it whispered, to avoid the recurrence of certain past orgies, of rather a destructive nature, that have taken place amongst the lodgers themselves. Of course, the excess of spirits of the medical student is proverbial, and it is, perhaps, unfortunate that the descendents of Bob Sawyer and Allen now have to face the Superintendent himself instead of their landlady, the " little, fierce woman " of Lant Street, Borough.

The student here to-day is missing much and some may not have heard the names of members of the Staff, who, by their personality, had such an influence upon the work of the Hospital. That he is inferior to his pre-War colleague we believe to be bunkum, any difference being due to the present conditions. Theory does tend to displace practice and, where this can be avoided, it is lamentable; indeed, we cannot deny that a man was once seen sitting outside the theatre reading with an interesting operation in progress inside. Again, it is said that we are losing the traditional spirit of the surgical firms, and, if so, we must recapture it at all costs. It is a pity that the dressers' room, above the Front Surgery, has fallen into disuse, for here was the *foyer* of the firm, where personal contact, enthusiasm and friendships were formed amongst the different members of the team.

The emotional crisis is now passing, for the exams. are finishing. Candidates for " vivas " have become a familiar sight about the Hospital. Recognition is easy. An unusually smart appearance, together with signs of adrenal, and other—activity, clinches the diagnosis of a victim for this supreme test of astute guessing.

Once again we have to bid a painful *au revoir*. Dr. Moore and Tony Thomas are both leaving us. " Chum," the H.P., has been our President, and Thomas has become so versatile with his many duties in the Hospital that he should be very useful as an Army M.O. Patrick Stone, with his suave manner, will be missed as he goes to the Wildernesse, both by us and by the Borough patients in the Surgery.

We welcome Geoffrey Hammond, and are able to inform our readers that, although he is not bringing his model trains with him, he will conduct a course at Orpington, whereby any resident with sufficient I.Q. may graduate from ticket-collector to station-master.

We are pleased to have Ripman, Miles Cross and Goodhart as the new O.P.Os.

C. F. H.

Orpington Letter

BACCHUS and his pards descended upon Orpington on Thursday, when a dance took place in the Mess. Many distinguished people were present and the gathering included friends from other Sector hospitals. We were glad to see the latter in such fine form, rolling round the floor. An old Southern custom, we are told.

Last week the patients gave another concert. This was well up to standard. The members of Ward 5 and Osler particularly distinguished themselves. There is little doubt that these entertainments will become a permanent feature in the Hospital.

Recently there has been great activity in the building trade at Orpington. The problem of enlarging the kitchens has been under consideration for some time, as the present buildings have had to supply the wards in both the New and Old Blocks, which has taxed their capacity to the full. It is a good sign that the foundations of these new extensions are of brick, and it is hoped that with luck they might rise upwards to form a completely brick building. Rats have a peculiar affinity for wooden huts which makes hygienic conditions difficult to maintain.

A plaster room is also in the process of construction for the joiners and carpenters. This will relieve the theatres of much routine replastering.

The decontamination centre, for many months in embryo has now matured. Certainly not a premature event.

Orpington is looking very autumnal. The grass is cut on the fields above the Hospital and the hockey season starts again for those who are left to play.

G. T. H.

Sherwood Park Letter

A FORTNIGHT has passed since the last Sherwood Dance, but it does not seem too late to record our thanks to the organisers, and to say that all present seemed to enjoy the evening, and hope that there will be more to come in the future.

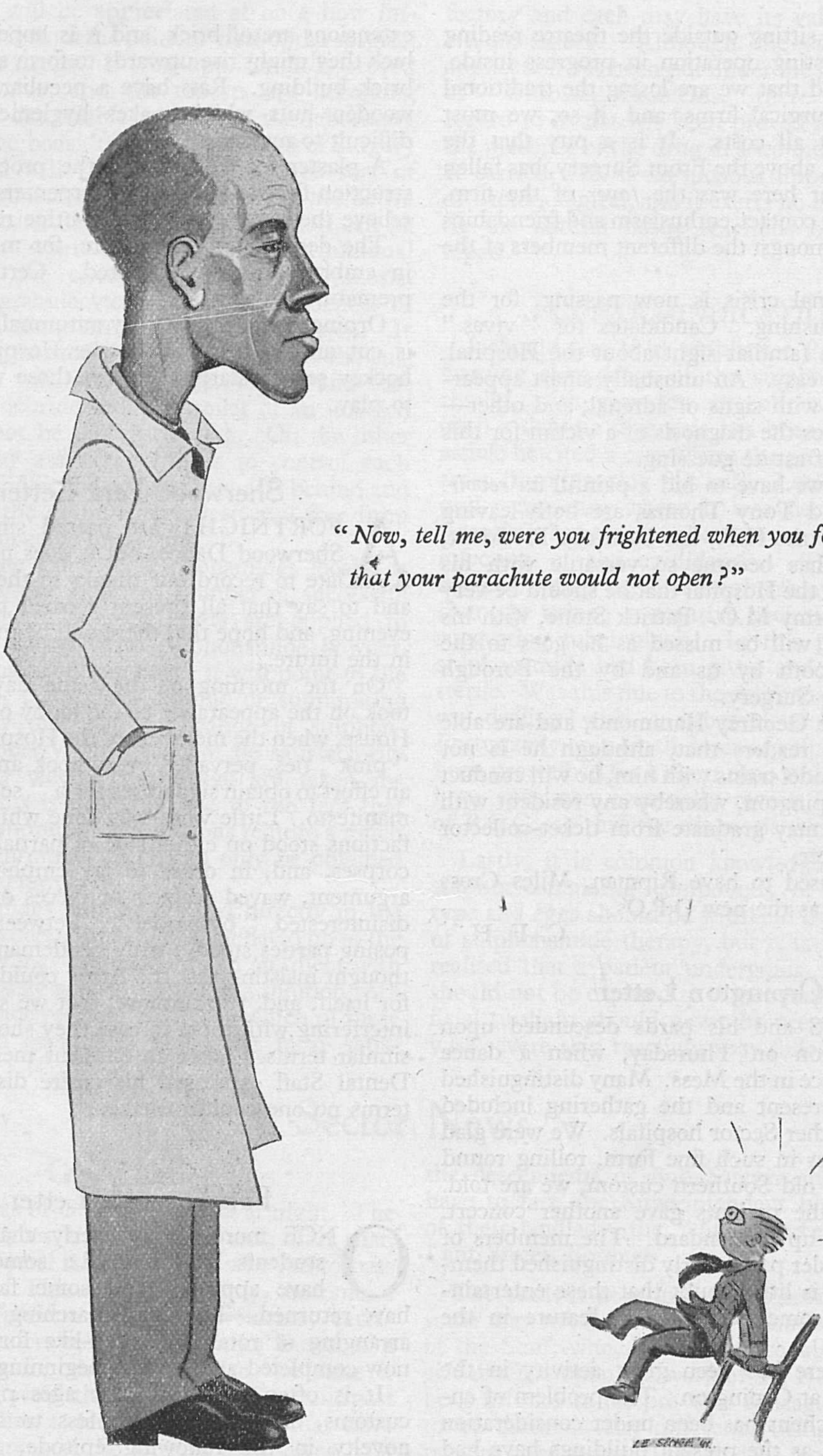
On the morning of the same day Sherwood took on the appearance of the lobby of the Lower House, when the members of the Hospital, wearing " pink " ties, pervaded every nook and cranny in an effort to obtain signatures for a " second front " manifesto. Little work was done whilst opposing factions stood on either side of partially dissected corpses, and, in order to lay emphasis to their argument, waved scalpels or pieces of some very disinterested " bystander." Between these opposing parties stood a truly gentlemanly school of thought insisting that the Army could well decide for itself, and, furthermore, that we should avoid interfering with them in case they should reply in similar terms. Later an eminent member of the Dental Staff expressed his entire disapproval in terms no one could mistake.

D. P. N.

Farnborough Letter

ONCE more the quarterly change-over of students has occurred; some new faces have appeared and some familiar ones have returned. The usual searching for " digs," arranging of rotas and such-like formalities are now completed and work is beginning.

It is often said that new ages produce new customs, and we must confess to seeing some novelty in the following episode, reported to have occurred in the operating theatre last week. A new dresser was washed up and assisting at an operation, which turned out to be a moderately



"Now, tell me, were you frightened when you found that your parachute would not open?"

By kind permission of "Torquay Tatler."

lengthy one. During the operation the dresser asked if he might be allowed to leave the theatre and, on being asked why he wished to adopt this unusual course, replied that he "didn't seem to be doing much and he wanted his tea." The resourceful anæsthetist immediately turned off the ether and thus avoided what might have been a nasty explosion.

Among the many changes in values which have accompanied the War, the enhanced value of the egg is conspicuous. Reflecting upon this circumstance, a member of the Mess, who had recently returned from a visit to his family and brought back a private supply of the commodity, delivered himself of this *bon mot*: "I used to think that it was a fine thing to have egg and bacon for breakfast, but I now know that it is a much finer thing to have egg and bacon for breakfast when all the other people at the table are eating plain bacon." Still, though some may experience peculiar pleasures, none of us has any particular complaints about the present gastronomic régime.

V. C.

Correspondence

Rebuilding of Guy's

To the Editor of the GAZETTE.

SIR,—The recent scenes of deliberate destruction in the front quadrangle cannot have failed to make a sad impression on all those Guy's men and women who have had to watch and suffer them in their daily work. Many others throughout the country and the world have have not seen what has been going on, although some may have heard of it.

After the east wing of the quadrangle had been gutted by fire, we were told that the local authorities had either ordered or advised that the whole east wing should be demolished as the walls were unsafe. It seemed at the time that the melancholy need for completing the vandals' work would have to be accepted. The sight of the actual demolition, however, aroused strong suspicions. The walls have needed great force to lay them low, and it is difficult to believe that they constituted the danger that we were told they did. The demolition is now nearly complete and must be accepted, but it is desirable that the whole question of further demolition and the still more important question of rebuilding should be considered more carefully than was done recently.

An irrevocable step has been taken, whether rightly or wrongly I will not argue; the symmetry of the front quadrangle has been ruined and it would appear that any future plans must include pulling down the west wing, whatever else is done. It may be that the whole question will be settled for us by further bombing, but allowing that this is not so, there must be many old and present Guy's men who would wish to feel that the future of Guy's House was not to be settled lightly and by inadequate representation. Alterations in policy and ruling are not irrevocable; systems can be changed and changed back again if desired, but the complete destruction of a building is irrevocable and, before such a step is taken, commonsense alone demands that proper and careful consideration be given to *all* the problems involved. These do not consist solely of the strictly utilitarian ones of the moment—such as the suggestions or orders of borough surveyors.

Guy's is a home and a tradition to many and it is right that every aspect of the question should be studied. Those who hold the present control of the fate of the buildings do so, not from personal and permanent possession, but as trustees; trustees with a responsibility not only to the past, but an even greater responsibility to the future. There is so much tearing down in London at this moment that we have become hardened to it, but it is imperative to stop and consider whether we ourselves are not perpetrating deliberate vandalism, or are on the way towards doing this.

Already it is being accepted as inevitable that even without the assistance of further enemy action, the whole of the front quadrangle and of Guy's House will have to go. In its place we are to have a new surgical block. It is at this point that I maintain we should, indeed *must*, pause and reflect. The views put forward here are personal; they may represent the feelings of a small minority of Guy's men, or possibly of a majority, that we cannot tell unless others give their views.

All agree that we require a new surgical block. I, for one, look forward eagerly to the time when this block shall be completed and the patients, nurses, students and staff are all able to enjoy the greater efficiency of working that will follow. What I do not wish to see is a complete expunging of all trace of the original Georgian building. I hold no brief for the retention of the main structure that is already doomed, but I believe that a little imagination, a little effort, and a little affection would result in a happy perpetuation of enough of the original features to retain the impression and atmosphere of old Guy's without in any way impairing the efficiency of the new. I postulate that there are three things which should be preserved:—

(1) The front quadrangle ;
(2) The facade ;
(3) The colonnade.

The problem of the front quadrangle is a difficult one as a result of the irrevocable step that has been taken in regard to the east wing. Presumably it will not be reconstructed in keeping with the west wing and therefore this will have to go. It should not be difficult to rebuild these wings modern in structure and efficiency, but retaining the dignity and atmosphere of the old.

This would inevitably be accompanied by a retention of the Georgian facade. After all, this is but a superimposed decoration, most of which was, in fact, added some seventy years after the main building was completed, and there can be no great technical objection to or difficulty in retaining it. Its retention would demand that the building behind it was in harmony, and, again, I can see no reason why this cannot be achieved without impairing the efficiency of the modern surgical block itself. Where there is a will there is a way. If those responsible for the new building have it at heart to see that this is done, it can be done. If the spirit or inclination is not there, of course it will not be done. The feeblest objection put forward is that our architectural advisers deny that any of the old can be retained. Without at all implying or intending to be personal, I suggest that if the decision is made to rebuild in a style that harmoniously blends the old and the new there would be no difficulty whatsoever in finding plenty of architects capable of carrying out the task. If it is true that we are trustees *for the future* of Guy's then this decision must become one of fundamental importance.

With so much of the Borough damaged, the dignity, beauty and restfulness of the Georgian front and its quadrangle have never been seen to greater advantage until the recent disaster destroyed the symmetry. Amidst the damaged streets, Guy's front stood unchanged. No Guy's man, and certainly no lover of the beautiful, could have looked without emotion upon the magnificent spectacle that it made when viewed from the level of London Bridge Station or from Denman Street—views impossible before the intervention of Hitler. After the War there is going to be a new Borough; it would be a crime deliberately to remove all trace of one of the finer architectural portions of the old. This is not only a parochial problem, nor even a London one ; the proper preservation of our inherited masterpieces is part of our national duty, and I maintain that it is improper to consider the future of Guy's House without keeping this fact well to the front ; it must weigh heavily in the final decision. If we ignore it, it is certain that future generations will criticise and probably condemn. We have only to look around to find examples of contemporary disapproval or despair of the unconsidered or stupid acts of destruction similarly perpetrated in the past. Fortunately, we can also see many examples where the old has been carefully or kindly preserved or blended with the new to the advantage and edification of many and the inconvenience of none. Almost all our most ancient and treasured buildings are a blending of, not two, but several periods of architecture and design.

I propose, therefore, that it should be accepted as fundamental in planning the new Guy's that the chief features of the front quadrangle should be preserved ; that the facade should be retained and that the building behind it should be designed so as to assist in completing the atmosphere of the old. The lovely old front railings, stonework and gateway fronting the street as yet remain untouched.

The colonnade presents possibly greater difficulties. To some it is just a cold and draughty place, but to many more it is a handsome and dignified structure that represents the very heart of Guy's. I know that many old Guy's men would feel its passing deeply. Fundamentally it is a passage-way leading from an entrance, and it should, therefore, not be a difficult matter to retain it or, at the very least, to reproduce it. There will have to be a passage-way through from the front to the park. To exchange the attractive and familiar colonnade for a mere interior corridor through a modern building seems to be an act devoid of all feeling or imagination. If it is decided that the colonnade is to be retained then no effort should be spared to see that the final design does retain it. After all, it is no uncommon method to throw the design of a new building open to competition.

If we could be sure, or even hopeful, that a modern building would be as beautiful or attractive as the old, even if in a totally different style, I would not protest, but of this I am far from certain. In 1860 Hunt's House was considered to be a handsome modern hospital block with every convenience ; in 1890 the residential college was thought to be the last word in what a college should be. To-day no one would shed many tears at their passing. How can we be sure that we shall not be presented with just such another soulless or inconvenient structure, although that fact may not become apparent for a generation.

It is important that the principle be decided now. It will be too late to start discussions when the house-breakers' sledge-hammer and pick-axe are at work. The east wing has gone without much comment; the rest of the grim business will be carried out with even less compunction unless the realities are fully appreciated by all and a free expression of opinion is made. I hope that all Guy's men and women, both past and present, who are interested in or feel deeply on these future plans will write now and say what they think and not just protest or approve in silence.

Yours, etc.,
R. C. BROCK.

Miniature Radiography

To the Editor of the GAZETTE.

SIR,—I have read your article on miniature radiography with some interest, as I happen to have been doing this work for the last six months.

As I do not do the actual X-raying myself but am engaged in interpreting and disposing of the cases, I should like to put forward a few points which have particularly struck me.

The first point is the number of radiologically hard fibrotic areas seen in films which have yielded positive sputa. In miniature radiography these are naturally the opacities which are most readily seen, but I shudder to think of the number of men who would be disseminating the disease on crowded ill-ventilated mess-decks had not this investigation been instituted.

As regards putting " the cart before the horse," I am sure that my old chiefs would support me in the statement that, in early pulmonary tuberculosis physical signs in the chest are notoriously equivocal, and that without bacteriological or radiological evidence one would hesitate to give a definite opinion except in obviously established disease. From my own personal experience, since H.P. days and later at Guy's, and particularly in the last few months, I have found that the most careful history and clinical examination would time and again be confounded by the radiological and bacteriological picture.

I quite agree that it is unfortunate that many healthy young men have to be sent to hospital, but surely it is better to put a so-called blemish on fifty men in order to discover early disease in one than to wait for constitutional symptoms to develop in that man, by which time he may well have infected others and his own disease have assumed forbidding proportions.

I feel I must reassure readers of the *Gazette* that in this investigation there is no actual wastage of man-power involved, and that if for any reason one person's investigations are doubtful then that person carries on useful work and returns for re-investigation later.

I believe from what I have seen during the last six months that by this method potential lives may be saved and much chronic invalidism reduced by detecting early disease.

I hope that one day we may see miniature or, at any rate, routine radiography more extensively applied in this country, particularly to the young adult population upon whom pulmonary tuberculosis seems to exert its greatest effect.

Yours, etc.,
D. LEEMING.

Royal Naval Hospital.
Haslar, Gosport.

A Barium Meal Emulsion

To the Editor of the GAZETTE.

SIR,—Some of your readers might be interested in a few details about a barium meal emulsion which has just been produced by the Guy's Dispensary.

A few months ago I noticed that the patients for barium meal seemed more reluctant than usual to drink a pint of our home-produced product. The reason was easy to discover. The emulsion was last month's vintage and had " gone off." No wonder one of the sufferers remarked that he " had gastric stomach and could never hold much without it comes back."

The problem is to produce an emulsion which is at the same time opaque to X-rays, palatable, does not separate on standing, and does not deteriorate on keeping. Flavour and consistency are most important, for if the patient is so nauseated that he will not drink it or vomits—perhaps over the radiologist—the investigation is a failure.

Mr. Izzard, of the Dispensary Staff, tackled the problem with these points in view, and has produced an excellent emulsion. The composition and method of preparation are as follows :—

Barium sulphate	5 lbs.
P.M.B. 444	3 ozs.
Vanillin	50 grains.
Soluble saccharine	3 grains.
Water	to 1 gallon.

The P.M.B. is allowed to soak in about six pints of water for a few hours ; the barium sulphate is then mixed in, preferably with a mechanical whisk. The other ingredients are added, and the whole passed through a fine sieve (No. 60) and made up to volume. Finally, the mixture is homogenised.

Diluted ready for use the emulsion remains completely suspended and its density is the same as that of two well-known proprietary brands against which it was tested.

Lastly, in these commercial days. it is worthy of note that the price per pint (ingredients only) is 5*d*., compared with 8*d*. and 11*d*. respectively for the two brands with which it has been compared.

Yours, etc.,
T. H. HILLS.

Guy's Hospital,
S.E.1.

Royal Medical Benevolent Fund

To the Editor of the GAZETTE.

SIR,—Old customs and traditions are greatly valued and treasured by elderly people—memories of past days are very precious—perhaps none more so than those of happy Christmas days gone by.

For many years your readers have most generously supported my appeal on behalf of the Christmas Gifts Fund of the Royal Medical Benevolent Fund and the annual distribution of a gift of 30*s*. has brought great happiness to our beneficiaries, many of whom are old and lonely.

I have now been President of the Fund for nearly twenty-five years and would like to thank all who have responded to my appeal in past years and have every confidence that this year the same kindness will be shown.

With an additional contribution we could raise our gift this year to £2 instead of 30*s*., which would give so much pleasure.

Will contributors please address to Christmas Gifts, Royal Medical Benevolent Fund, 1, Balliol House, Manor Fields, Putney, London, S.W.15, and their gifts will all be gratefully acknowledged.

Yours, etc.,
THOS. BARLOW,
President.

Memories of Guy's

TO revisit the scenes of one's student days after thirty-odd years is an experience. It is an experience full of thrills, of memories, of pleasure, and of disappointments. When this visit happens to be in the wartime summer of 1941, all these feelings are intensified. One of the disappointments is that one may not meet a soul one knows.

The day was as wet as it used to be, but there was not the same mud in the Borough High Street. Approaching the Hospital I did not notice as many brass-plates on the doors of the houses flanking Guy's, as one used to. Behind these brass-plates resided generations who dreamed of the day when they should leave behind for part of the day the smell of hops for the superior air of Harley or Wimpole Street. Now we (my daughter and I) are at the Hospital gates, but where—oh, where !—is Down Bros., which we looked upon as *almost* a part of Guy's ? Just a heap of bricks, alas ! I rejoice to see Thomas Guy still gazing towards the City, and rejoice, too, that he cannot see the martyred remains of the Counting House and the Superintendent's House. The Colonnade appears absolutely unchanged, except that I fail to see a top-hatted porter at the entrance to whom I expected to have to explain that I was *once* a Guy's man. Slinking in almost guiltily, I take a good look round, and the first sight is of a gaping wound in Pat and Sam (or was it the other side ?). Funny that Hitler should do that, for Pat and Sam I recall as a rather sore spot.

I remember the building of the theatres on the top floor of the Surgical Block, before which the whole building had to be strengthened from foundations upwards to take the extra weight. It does not seem like Guy's to find the whole Surgical Block deserted. I visited the Surgical X-ray Department in the spot which, in my ward-clerk's days, was the Front Surgery. Who can fail to remember the wonderful suppers in the old dressers' room ? It was the clerks' duty to get the provisions from the Borough and a cask of beer from the " Ship and Shovel " (later I looked for this, but could not even spot the site thereof amid the desolation surrounding the Hospital) and the dressers' privilege to pay the piper for the week. The Dressers' Room was right through the Surgery through a door and upstairs ; the bedroom of the A.H.S. for the week was next door. Three months later, when I became dresser, the Front Surgery had ceased to be and Surgery had moved to the new Out-patient Block, marking another milestone in Guy's history. Is it indelicate to ask whether the police are still refreshed behind a screen in Surgery ?

Even the notice-board still hangs opposite the South African War Memorial. Leaving the Colonnade for the Park, one with memories of the past cannot but miss " Clinical." The old Madhouse, where the curious could still see the original padded room, had a fascination of its own. I can remember seeing a rat running round the wards (were they not John and Miriam ?) so I suppose it was time they went, but somehow I feel a slight grudge against Shepherd House for occupying the same site. Where are the table-tops on which firm after firm carved their names for posterity? One full table-top hung upon the wall of Clinicals' room and another was well on its way towards being full up. Does the appointment of Clinical still exist in its old form? I regarded it as almost the best appointment and one of the happiest three months of Hospital life. I consider that the appointment of "Clinical" in the form in which it existed in my time placed Guy's ahead of every other London hospital, for I believe that no other hospital had it in the same form. To have the pick of every case admitted, medical or surgical, is a wonderful preparation towards most branches of medicine. I hope it remains unchanged though the old building has gone.

Looking round the Park I find many other changes. The Bacteriological Laboratories and the Dental School look much the same, as also the Nurses' Home. The Medical School, some of it completed during my time, looks bigger. The old Dissecting Room has disappeared and Nuffield House has arisen. Dispensary is in the same old spot, and Hunt's Building looks almost unchanged except for some added balconies. Alas, we cannot take the lift up and must climb a wooden stair! Some will recall with me the occasion on which many had been up to the top of Hunt's Building to view Halley's Comet; when the "show" was over, the lift was crowded beyond its capacity. Halfway between two floors it jerked to a sudden stop. The landing was being redecorated at the time, and before long a rescue squad was on the scene and we escaped by means of the painters' ladders. We heard later that the wire rope had jumped the pulley and jammed. Lucky escape for us!

Last week I went as far as the first landing to look for the busts of Drs. Addison and Bright. But I only found the pedestals on which they used to rest. As I write the siren has just sounded and it sets me wondering whether those busts went with the staircase and lift. I recall a prank that a friend and I played by taking Dr. Bright off his pedestal and putting him in a bed one night. We then persuaded Sister to send for the H.P. to see a new case. The H.P., overtired but good-natured, took it in good part, but "we didn't ought to have done it."

Time being limited we did not explore as far as Out-patients', and were driven underground by a heavy shower. Below ground of course I found all sorts of wartime changes and additions, glimpses of theatres, etc. Going towards the College, absence of electric light reminds me that the College is no longer in use. Outwardly it looks unchanged, but I suppose that it is burnt out. I wonder if the imperturbable Gray is still living? It was said of him that he could wake the soundest sleeper by the simple process of removing the bedclothes and setting the protesting resident on his feet.

Has the milk-churn gone, I wonder? I remember it being seized from a platform on the journey back to Waterloo from Richmond. At the next cup-tie at Richmond it appeared in the Guy's colours, and has, I believe, been a feature of cup-ties ever since. I was on the first motor-'bus to be privately chartered to go from the Hospital to Richmond for a cup-tie. It drove right round Piccadilly Circus with men sitting on the steps bellowing comic songs and the police did not quite know what to do about it, so did nothing. Those were the days of Teddy Morgan, P. F. McEvedy, R. H. Mullins, Alcock Brothers, Harrison, H. Lee and many other stalwarts, when for about ten years Guy's fought the Final with London year after year.

Those happy days have gone, but let us hope that before long for the younger generation of Guy's men they will return, and we shall see a new Guy's rebuilt in a happier world!

The last time I wrote to the *Gazette* was during the 1914–1918 War (it is pointless now to call that the Great War) from a hospital in Greece attached to the heroic Serbian army—both countries now, alas, in the hated Nazis' hands!

As I finish at midnight the "All Clear" is appropriately sounding.

A. A. G.

Guy's Hospital Gazette

A Journal of Hospital News, Medicine, Surgery and Dentistry.

Published in alternate Saturdays. Price 9d.

Marriage, Birth and Death announcements inserted free.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Reviews

A Text-book of the Nursing and Diseases of Sick Children. By various Authors. Edited by ALAN MONCREIFF, M.D., F.R.C.P. Lond. Published by Lewis & Co. *Price 21s.*

THIS manual—dedicated to Great Ormond Street nurses, past, present and future—is a comprehensive text-book designed for the study and future reference of nurses who are training for the Children's Section of the State Register. The editor and most of the contributors are members of the Great Ormond Street Staff. The Sister Tutor and the Hospital Dispenser have collaborated in checking the nursing detail and the references to drugs. The result is a book which provides a valuable guide to the nursing of children, and one which may also be confidently recommended as a book of reference in the class-room and children's ward of the general hospital.

H. W. G.

Sport

Rugby

Guy's v. Middlesex Hospital

At Honor Oak Park on Saturday, September 27th.

GUY'S made a good start in the opening match of their third war-time season by defeating Middlesex Hospital by 2 goals and 2 tries to 2 goals.

As Steeds, the Middlesex captain and hooker, could not play, the expected duel with Sharpe did not materialise ; consequently, Guy's had more of the ball from the scrums.

The opening stages were tame, but gradually both sides settled down to give a fine exhibition of hard, fast and clean football which was a joy to watch.

Strathie was the main-spring behind Guy's early efforts to break through. He punted ahead for Lee to collect the ball only to knock-on when tackled, and in the next movement he actually went over the line, but lost the ball before touching down. Following a fine run by Camp, Strathie broke through the centre, but had no support. Middlesex outsides could not get going, but Swanson put in a dangerous run until tackled by Lewis.

Guy's opened the scoring after twenty-five minutes with an unconverted try by Renton, following a run by Camp. Keeping up the pressure Scott tried to steal away but was collared ; Brangwin and Gartrell made efforts to break through, followed by Lillywhite making a nice dribble after Brangwin had been tackled, and Renton, backing up well, scored his second try for Mullins to convert.

Middlesex improved a lot towards half-time, but could not penetrate Guy's defence, the interval arriving with Guy's leading by 8 points to nil.

The second half opened with Middlesex attacking strongly and a good chance was spoilt by a forward pass. A similar misfortune befell Guy's. From a kick for a scrum infringement Middlesex made a lot of ground, their three-quarters indulged in some beautiful passing and interchanging of positions, culminating in Cockroft touching down for an excellent try which Robinson converted with a really grand kick.

The tackling of Middlesex prevented Guy's making headway, but a cross kick enabled Brangwin to gather the ball and force himself over in the corner for an unconverted try. Mullins made an excellent kick, but the ball hit the upright. At this stage there was nothing between the two sides as Middlesex were playing a nice open game. Hinde sold a beautiful dummy to deceive nearly the whole of the Guy's team, and made a lot of ground before being tackled, but from the loose ball Alexander went over for a try which Robinson converted with a briliiant kick from the touch line.

With only one point dividing the teams, play became most exciting. Swanson was the danger, but it was not one of his good days. He dropped a short pass, and Camp seizing the opportunity picked up and sent Brangwin through to touch down under the posts for Mullins to add the extra points. Nobody could have wished for a better opening game, and if this is an example of the standard of play in future games, then players and supporters alike are in for a grand season. Result : Guy's, 2 goals and 2 tries (16 points) ; Middlesex, 2 goals (10 points).

Guy's Team.—T. L. T. Lewis ; R. F. Camp, P. L. Brangwin, W. H. Lillywhite, P. C. Gartrell ; D. M. Strathie, N. I. Scott ; J. D. Everall, R. M. Sharpe, A. B. Lee, A. G. Albers, J. Breen-Turner, G. F. Swann, T. W. Renton, M. R. Mullins (Captain).

Guy's v. King's College Hospital

Played at Horton, Epsom, on Saturday, October 4th, 1941.

ALTHOUGH Guy's managed to beat King's College Hospital they had to defend vigorously for a long period, especially during the first half, when King's had the ball from nearly every scrum and made some very dangerous attacks.

Three times during the course of the game King's took the lead, but with that wonderful spirit associated with the Guy's team these last three seasons, they fought back and, in the last half-hour, gradually gained supremacy by some delightful rugger.

Naturally, Guy's missed the services of Strathie, Brangwin, and Sharpe, but their deputies performed most creditably, although the outsides were often handicapped by not getting the ball.

For most of the first half Guy's were defending and, on several occasions, King's went close to scoring. Their efforts deservedly met with success when Hanley went over, after fifteen minutes, for an unconverted try. Guy's made a few spasmodic attacks which they could not sustain. Swann gathered from the loose to send Hildick-Smith away, and then Macrae-Gibson looked dangerous with a neat break through. Palmer was very lively on the King's wing and this led to a grand duel with Gartrell.

Camp levelled the scores with an unconverted try after thirty minutes' play, but King's kept up the pressure, and Young, who played a sound game throughout, went over for King's. Hereabouts, Guy's forwards, without exception, were playing a hard game and tackling vigorously.

Guy's took the lead just before the interval with a try initiated by Macrae-Gibson, who punted ahead for Swann to gather the ball and pass to Breen-Turner, who scored near the posts for Mullins to convert.

Soon after the restart Palmer crossed for King's, but again the kick was missed. After Mullins had brought off a grand tackle to stop Moody, Guy's took control. Camp was almost through, but just went into touch. Lee tried to break through but was pounced upon by three opponents. After Palmer was stopped near the line, Lillywhite, at fly half, made a good kick to touch to make ground.

A penalty kick enabled Mullins to place Guy's ahead. Guy's three-quarters, getting more of the ball, indulged in some fine movements. Camp again had bad luck in going into touch when a try looked certain. King's looked dangerous when Palmer made a run, but Lewis relieved with a long touch kick. Gartrell looked all over a scorer after a 25 yards run, but was caught by Palmer.

An excellent movement by Scott, Macrae-Gibson and Gartrell deserved a better fate, but Scott made a grand break-away a little later and sent Gartrell over for a try in the corner.

By judicious kicking to touch and an occasional three-quarter movement Guy's continued to attack. One fine movement found Hildick-Smith in possession and, making an opening, neatly dropped a goal.

Following fine play by Young, King's broke away and, from a scramble near the line, Dawson went over for King's fourth try, which was not converted. No side was then called, and although Guy's were the eventual winners, they had a hard struggle. Score: Guy's Hospital, 1 goal, 1 drop goal, 1 penalty goal and 2 tries (18 points); King's, 4 tries (12 points).

Team.—T. L. T. Lewis; R. F. Camp, G. Hildick-Smith, A. C. Macrae-Gibson, P. C. Gartrell; W. H. Lillywhite, N. I. Scott; J. D. Everall, A. B. Lee, B. H. Wilshire, A. G. Albers, J. Breen-Turner, G. F. Swann, T. W. Renton, M. R. Mullins (Captain).

Hockey

GUY'S HOSPITAL (TUNBRIDGE WELLS) *v.* BART'S HOSPITAL.

Played at Chislehurst, October 18th, 1941.
Drawn 2–2.

WE felt a trifle anxious when, drawing only on the students at Sherwood Park and Pembury Hospital, we took on the Bart.'s XI, but, by tenacity and perseverance, we managed to hold our own. The game was a fast one, and the opposition, if a little more skilful, was certainly an older and more experienced side.

Guy's took the ball up the field from the bully off, but, on the whole, Bart.'s pressed more during the early and last few minutes of the game. After about twenty minutes of the game their inside left beat Rayner with a hard shot to give them the lead. Burt, playing centre forward, dribbled through well from the halfway line and, drawing out the goalkeeper, their captain, G. E. Hicks, brought the scores level.

Guy's pressed hard again after half-time, but a number of opportunities were missed and again it was Bart.'s who scored first, this time through their left wing. In the play that followed Rayner saved well more than once and, ten minutes from the end, Burt was able to score again from a good centre by Thompson.

Despite hard pressure by Bart.'s in the closing minutes, Guy's managed to hold out. Of the forwards, Saunders and Burt did much hard work, while the half line was generally sound. The backs, though at times a little slow on the ball, managed to clear satisfactorily.

Team.—D. J. Rayner, B. H. Prideaux, J. M. Richards, P. J. Parr (captain), G. Thompson, K. Y. Khong, — Burt, D. A. S. Saunders, P. Maxwell Stephens.

Hospital Information, etc.

Notices

The Dental Dinner and Dance

WE have been asked to bring to your notice that the Dental Society has arranged for a Dinner–Dance, to be held in the ballroom of the Grosvenor House Hotel on Friday, November 14th, from 8 p.m. to 2 a.m., dancing to Billy Mayerl and his Band. It is hoped that as many as possible will endeavour to be present on this occasion and contribute to the success of the evening.

Tickets, price 12*s.* 6*d.* inclusive, can be obtained from the Librarian, The Wills Library, Guy's Hospital, S.E.1.

GUY'S HOSPITAL RUGBY FOOTBALL CLUB.
FIXTURES 1941–42.
FIRST XV.

Date.	*Ground.*	*Opponents.*
1941.		
Nov. 1	Oxford	Oxford University.
Nov. 8	Northampton	Northampton.
Nov. 15	Teddington	St. Mary's Hospital.
Nov. 22	H.O.P.	Metropolitan Police.
Nov. 29	H.O.P.	Aldershot Command.
Dec. 6	Old Deer Park	Rosslyn Park.
Dec. 13	H.O.P.	Royal Air Force.
1942.		
Jan. 3	H.O.P.	Wasps.
Jan. 10	Chislehurst	Middlesex Hospital.
Jan. 17	H.O.P.	Army XV, Sandhurst.
Jan. 24	Oxford	Oxford University.
Jan. 31	Hale End	London Hospital.
Feb. 7	H.O.P.	Metropolitan Police.
Feb. 14	—	—
Feb. 21	H.O.P.	Rosslyn Park.
Feb. 28	Aldershot	Aldershot Command.
Mar. 7	H.O.P.	St. Mary's Hospital.
Mar. 14	Bedford	Bedford.
Mar. 21	Guildford	St. Thomas's Hospital.
Mar. 28	H.O.P	Welsh Guards.
Apr. 4	—	—
Apr. 11	Sudbury	Wasps.

SOCIETY OF APOTHECARIES OF LONDON.
DATES OF EXAMINATION.

Surgery.—November 10, 12, 13.

Medicine, Pathology and Forensic Medicine.—November 17, 19, 20.

Midwifery.—November 18, 19, 20, 21.

Changes of Address

C. S. Darke, M.D., Hillcrest, St. John's Park, Tunbridge Wells (Tel.: Southborough 607).

A. P. Davies, Lieut. A.D. Corps, Dental Centre No. 2, Aborfield, Berks.

R. J. Halden, L.D.S., R.C.S., 2, Park Crescent, Regent's Park, W.1 (Tel.: Welbeck 3005).

Oswald Marriott, M.D., Revenue House, 7, Poultry, E.C.2. (Tel.: City 3344).

Miss J. M. Parry, Ruskin College Hospital, Oxford.

Miss M. C. Sargant, Austin's, Cookham Dean, Berks.

E. D. Whiteley, Lieut. A.D. Corps, c/o Glyn, Mills & Co., Kirkland House, S.W.1.

J. S. Batchelor, F.R.C.S., 97, Harley Street, W.1.

H. B. O. Cardew, F/O R.A.F. (V.R.), R.A.F., Exeter.

D. A. Davies, S/L R.A.F.

H. Kanter, Lieut. R.A.F., S.A.M.C., P.O. Box 5875, Johannesburg, S.A.

Miss J. W. Macnab, Lowestoft and North Suffolk Hospital, Lowestoft.

S. W. Wright, M.B., B.S., 78, Dartmouth Avenue, Newcastle-under-Lyme.

Prisoners of War

R. D. Campbell Hart, Lieut. R.N.V.R., No. 53, Camps Concentramento, Prigionieri di Guerra, Montalbo, Piacenza, Italy.

Missing

HINDE.—In September, 1941, reported missing at sea, Captain E. J. F. Hinde, R.A.M.C.

Papers by Guy's Men

Gibb, C. de W. A case of left tempero-sphenoidal abscess with recovery. *J. Laryngol. Otol.*, 1941, **56**, 176.

Mutch, N. A new sulphonamide (Sulphonamide E.O.S.). Its pharmacology, chemotherapy and curative value in meningococcal meningitis. *Brit. Med. J.*, 1941, ii, 503.

Hall, H. D. An unusual case. *Brit. Dent. J.*, 1941, **71**, 213.

Cameron, H. C. Fifty years' progress in Pædiatrics, Poliomyelitis, Meningococcal meningitis. *Clin. J.*, 1941, **70**, 253.

Douthwaite, A. H. Tetanus. *Ibid.*, 260.

——— Gastro-enterology. *Practitioner*, 1941, **147**, 622.

Naval Commendation

Surg.-Lieut. Joseph Patterson, R.N.V.R., has been commended for bravery during an air-raid on Plymouth

Births

BIRKS.—On October 3rd, 1941, to Mary (née Morgan), wife of P. H. Birks, Captain R.A.M.C.—a son, Peter Brian.

GILLHAM.—On October 14th, at Twyford Nursing Home, Bognor Regis, to Doris, wife of F/Lt. R. E. Gillham, Dental Branch, R.A.F.V.R.—a son.

Marriages

WHITELEY—DOWLING.—On August 2nd, 1941, at the Church of Our Lady of Loundes, Wanstead, E. J. Whiteley, Lieut. A.D. Corps, to Eithne Elizabeth Dowling.

Deaths

ROONEY.—On April 5th, 1941, John Joseph F. Rooney, Lieut.-Col. I.M.S. (Foreign and Political Dept.), Residing Surgeon, Bushire, Persian Gulf.

SAMUELS.—On October 12th, 1941, suddenly, at Churchill, Barnfield Hill, Exeter, Isidore Samuels, L.D.S., R.C.S.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry
and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV | *15th November* 1941 | *Number* 1391

PASSIM

IN contrast to the present correspondence concerning the possible fate of our Hospital buildings during and after the War, it is interesting to note that one department of the Hospital has been completely rebuilt and reorganised within its old shell. Rebuilding of the Pharmaceutical Department was commenced in 1938 ; its completion has been signalised by the recent visit of the trustee of the Bernhard Baron Charity Fund, through whose generosity the work was made possible. The new department, a short description of which appears elsewhere in this issue, consists of a pharmaceutical manufacturing laboratory, equipped with the most modern type of plant and apparatus and a large, well-lighted tiled dispensary, with as many as seven separate out-patient hatches, each more or less a self-contained unit so far as stock mixtures are concerned. In addition, there are separate rooms for sterilisation, for analytical determinations and for oils and disinfectants, as well as a common room for the staff. The reorganisation of the out-patient system with the institution of appointments for all out-patients, old as well as new, was introduced to eliminate as far as possible the long hours of waiting spent by patients on the benches. The new system, which has involved a great deal of hard labour on the part of the out-patient staff, has proved very successful as yet. Its whole purpose would, however, have been vitiated had the long queues at the Dispensary window, equally familiar during any peace-time out-patient session, been allowed to continue. With the new department working at full capacity, it will be possible to eliminate much or all of this waiting, whilst the figures for probable output of tablets, stock mixtures and ointments reach almost astronomical levels.

◆

One of the more fortunate results that have accrued from the long periods of comparative quiescence from air-raids has been that teams of skilled workers in various parts of the country have been able to devote much of their time to research upon some of the problems of traumatic medicine and surgery. Many of these problems have a bearing just as important in civilian as in Service medicine and in peace-time as much as in time of war. Thus the recent M.R.C. War Memorandum upon the Prevention of Hospital Infection of Wounds deals with the mechanism of infection of open wounds with pyogenic organisms, such as mostly occurs in the hospital ward. The probable causative factors and channels of spread, such as infected dust and droplet nuclei from the respiratory tract which infect the hands or the instruments used for the dressings, or contact of these latter with contaminated dressings, may easily become operative in any " clean " surgical ward. Most of the preventitive measures recommended have already been adopted by a revision some weeks ago of the technique of wound dressing at this Hospital. In essentials, these measures consist of the abolition of air currents in the ward at dressing time, the wearing of masks by the dressers to minimise droplet spread, and, in particular, careful attention is paid to the sterilisation of the instruments with which the old dressings are removed, and to the fresh set of instruments with which the clean inner dressings are reapplied.

◆

Owing to the lack of space consequent upon paper restrictions, it has been decided temporarily that the news-letters from the various Sector Hospitals should appear monthly in future instead of fortnightly ; the news from half of the Sector will appear in one issue of the *Gazette*, and from the other half in the next issue. It is hoped that this restriction of these popular features may soon be lifted, but in the meantime the interest of the individual letters with double their previous real news value should be much increased.

WING-COMMANDER R. D. GILLESPIE is shortly to visit the United States of America, where he is to give a series of lectures at various towns upon the subject of Psychoneurosis in Peace and War and the Future of Human Relationships, under the general sponsorship of the Salmon Committee on Psychiatry and Mental Hygiene. It is to be hoped that he will find time for a brief visit to Hollywood in order to express in person some of the gratitude which this Hospital owes for the generosity that has been shown to us.

The New Chemotherapy in Puerperal Infections

By G. F. Gibberd, M.S.

THE hæmolytic streptococcus used to cause many more deaths in child-bed than all the other pathogenic organisms put together. In 1935, a typical year, of the thirty deaths among the patients admitted to Queen Charlotte's Hospital Isolation Block for puerperal sepsis, twenty-three were due to hæmolytic streptococci, five to anærobic streptococci, and two to other organisms. From 1936 to 1939, among the forty-two deaths in patients admitted for puerperal sepsis, twenty were due to hæmolytic streptococci, nine to anærobic streptococci, and thirteen to other organisms. After the introduction of the new chemotherapy in 1936 the hæmolytic streptococcus was responsible for less than half of all the deaths instead of the habitual three-quarters or more.

In order to study the factors which brought about this change it is necessary to know something of the morbid anatomy of hæmolytic streptococcal puerperal infections. If there is one feature more than another which characterises the hæmolytic streptococcus, it is its capacity for invading tissues rapidly and extensively. Most of the characteristic clinical features of infections with this organism follow naturally from its invasiveness. It kills not because it produces so poisonous a toxin, but because it tends to invade such large areas of tissue. When it infects the birth-canal after labour it tends to spread rapidly into the muscular wall of the uterus, and in this situation there is ample opportunity for invasion of the smaller veins and venules particularly in the region of the placental site. From these numerous foci constant streams of organisms may find their way into the general circulation and so produce (and what is more important, maintain) a septicæmia. Often the organisms pass through the wall of the uterus directly into the peritoneal cavity, and in the worst cases the infection rapidly becomes a generalised peritonitis. Widespread invasion of the peritoneal cavity or of the blood-stream, or a combination of both, are almost invariably found in fatal cases. Sometimes the peritoneum is able to check the invasion and to localise the infection to the lower abdomen; in these cases, even when a very large inflammatory mass is found, the patient nearly always recovers so long as a severe septicæmia does not complicate the local lesion. Thanks to the bacteriological researches of Leonard Colebrook and Ronald Hare, and to the studies in morbid anatomy of R. M. Fry we have a very precise picture of these infections, their bacteriology, their anatomy, and their clinical features; it is in this field that we can study the effects of sulphanilamide therapy.

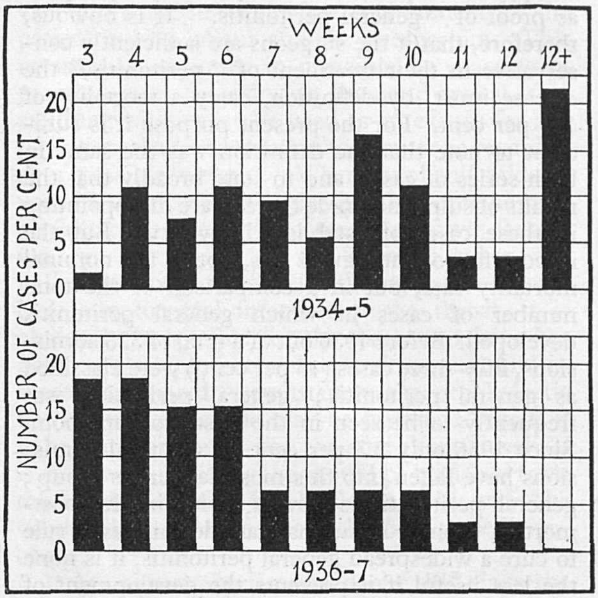
Immediately after the introduction of sulphanilamide compounds at Queen Charlotte's Hospital Isolation Block, the gross mortality rate among hæmolytic streptococcal infections admitted to the hospital fell from 24 per cent. to 4.7 per cent. (Colebrook and Keny, 1936). It is necessary to consider the ways in which this improvement came about. It will be seen from the table which is produced here that, prior to the use of sulphanilamide (1933–1935), infections which were limited to the birth-canal had no significant mortality, and even extra-uterine spread of infection so long as it remained localised carried a mortality of only 1.5 per cent. In contrast with this, septicæmia carried a mortality of 46 per cent.,* and general peritonitis a death rate of 77 per cent. When general peritonitis and septicæmia occurred together the result was fatal in 90 per cent. of cases. Prior to 1936 the high total mortality (19 per cent. for all admissions) was clearly due to the large proportion of cases developing septicæmia or general peritonitis or both. Since the introduction of sulphanilamide compounds the low total mortality (5 per cent. for all admissions) is clearly due to the small proportion of cases with invasion of the blood-stream or general peritoneal cavity, so that if sulphanilamide is responsible for the improvement it is because it has prevented, rather than cured, the septicæmia and the peritonitis.

Let us consider each of the clinical groups in turn. It so happens that in the mildest type of infection (*i.e.*, infection limited clinically to the birth-canal), a type in which we can expect recovery in almost every case, the use of sulphanilamide has been associated with an actual increase in the death-rate, but the numbers are insufficient to give any significance to changes in such a small mortality rate. The important point to notice in this group is that it contained less than half of the cases before 1936, whereas it contained three-quarters of the cases after the introduction of sulphanilamide. We should notice not only the two deaths in the sulphanilamide-treated group as compared with no mortality in the earlier group; rather should we notice the 297 who recovered in the sulphanilamide-treated group, as compared with the 152 who recovered in the earlier group.† The use of sulphanilamide seems to have swelled the numbers falling into the safest clinical group at the expense of those in the most dangerous groups.

---

* Note for those who think that curative medicine began with the discovery of sulphanilamide. N.B.—Prior to 1936 more than half of the patients suffering from hæmolytic streptococcal septicæmia in the puerperium did, in fact, recover.

In the type of case in which the infection has spread beyond the limits of the birth-canal and given rise to a localised peritonitis and pelvic cellulitis, but has not spread to the blood-stream, the prognosis as regards ultimate recovery is so good in any case that comparison of mortality rates is of no real value. This group does, however, afford an opportunity for judging the effect of sulphanilamide on the clinical course of the disease in a moderately invasive type of infection. When an inflammatory lump developed in the lower abdomen or pelvic cavity in the course of a hæmolytic streptococcal infection, it was, prior to 1936, generally a matter of many weeks or even months before the inflammatory mass resolved or the pyrexia subsided. Since the introduction of sulphanilamide the average duration of the illness in these cases has been considerably shortened. The diagram, which I prepared in 1937 to illustrate this point, is reproduced here by kind permission of the Editor of the *British Medical Journal*. It shows the duration of the illness in non-fatal hæmolytic streptococcal infections in which an extra-uterine inflammatory mass was demonstrated. In the days before sulphanilamide more than half of these patients were still in hospital eight weeks after their confinement, and more than 20 per cent. were in hospital for longer than twelve weeks. After the introduction of sulphanilamide less than 20 per cent. were in hospital for more than eight weeks, and it became a rarity for a patient to remain for more than twelve weeks. Thus in the less severe of the invasive types of the disease, sulphanilamide appears considerably to hasten resolution of the infection.



Hæmolytic streptococcal puerperal infections with localised spread to lower abdominal peritoneum, pelvic cellular tissue, etc. Diagram showing the durations of the illness (interval in weeks between confinement and discharge from hospital) in non-fatal cases in which an inflammatory mass was demonstrated clinically beyond the limits of the birth-canal. The percentage distribution of patients is indicated by the height of the columns. The results for 1934–35 (before sulphanilamide) are compared with those for 1936–37 (after sulphanilamide). — *British Medical Journal*, October 9th, 1937.

In cases of septicæmia (confirmed by blood-culture) there is a significant, though moderate, fall in mortality rate from 46 per cent. to 28 per cent. More detailed analysis of these cases shows that the greater part of the improvement is associated with a diminution in the incidence of the most severe type of septicæmia, a feature which suggests that sulphanilamide has helped by preventing extension of the infection rather than by curing a high proportion of very severe blood-stream infections.

When we consider the most invasive types of infection—viz., general peritonitis—the mortality rate has diminished a little since sulphanilamide has been used, although when septicæmia complicates a general peritonitis the mortality appears to have risen to 100 per cent. in the later series. These mortality rates must not, however, be taken too literally, because so much depends upon the criteria that are demanded before a case is classified as " general " (as opposed to " localised ") peritonitis. At Queen Charlotte's Hospital, for purposes of classification, nothing short of biopsy or autopsy of the peritoneal cavity has been accepted as proof of " general peritonitis." It is obvious, therefore, that if the surgeons are sufficiently conservative in their treatment of " peritonitis," the disease must, by definition, carry a mortality of 100 per cent. For the present purpose it is sufficient to note that the definition was the same in both series of cases, and to state broadly that the results of sulphanilamide therapy are disappointing in these cases of established severity. But the importance of the figures lies, not in the nominal mortality rate, but in a comparison of the total number of cases in which general peritonitis developed. Before 1936 out of a total of 328 admissions, fifty-three cases (16 per cent.) were classified as general peritonitis ; general peritonitis was frequently to be seen in the post-mortem room. Since 1936 only 2.3 per cent. of the total admissions have fallen into this most dangerous group ; general peritonitis is now a rarity in the post-mortem room. If sulphanilamide fails as a rule to cure a widespread general peritonitis, it is none the less useful if it prevents the development of so fatal a condition.

---

† Note for those who believe in the maxim "when in doubt give sulphanilamide." N.B.—One of the deaths in the 1936-39 group occurred in a patient whose infection was proved at post-mortem examination to have been confined entirely to the birth-canal. She died from agranulocytosis, not from hæmolytic streptococcal infection. She died from sulphanilamide. She died from treatment.

Detailed study of this sample of hæmolytic streptococcal puerperal infections show, very broadly, that the reduction in mortality to one quarter of the original figure since the introduction of sulphanilamide is due mainly to a corresponding reduction in the incidence of the most invasive types of infection. On the other hand, if the clinical efficacy of chemotherapy is tested in patients with varying amounts of tissue already infected, it will be seen that the relative value of treatment falls off in direct proportion to the extent of the disease. With a localised extra-uterine infection sulphanilamide appears greatly to hasten recovery. When the blood-stream is already invaded, sulphanilamide appears to reduce mortality to about two-thirds of its original figure. When general peritonitis occurs there is a slight, but probably significant, improvement following the new treatment. When general peritonitis and septicæmia are combined it is not possible to ascribe any beneficial effect to the use of the new drugs.

The practical lesson to be learnt from this analysis of results is that the earlier we give the drug in the course of the disease, the greater are the benefits that we can expect from its use, but this conclusion must be applied with due regard to other considerations in actual practice. Although the hæmolytic streptococcus may invade tissues very rapidly, its rate of progress is seldom so great that we cannot wait for a bacteriological diagnosis : to give sulphanilamide to every patient as soon as she develops a pyrexia in the puerperium is bad for the patient no less than for her doctor. Any significant pyrexia in the puerperium, unless it is obviously due to some other cause, will always suggest the possibility of an infection of the birth-canal. This possibility in turn immediately calls for a bacteriological diagnosis. It is the diagnosis rather than the treatment which is the urgent matter, and an organisation which cannot report within twenty-four hours on the presence or absence of hæmolytic streptococci in a vaginal swab is not competent to care for a patient with pyrexia in the puerperium. If hæmolytic streptococci are grown from the vaginal swab in a patient with clinical evidence of infection it is practically certain that she is suffering from a hæmolytic streptococcal puerperal infection, and sulphanilamide (or similar drug) should be given without delay. If a competent bacteriologist fails to grow hæmolytic streptococci from a swab taken with proper technique, then it is extremely unlikely that these organisms are present in the birth-canal, and sulphanilamide should be withheld. There are two exceptions to this general rule of withholding chemotherapy until a bacteriological diagnosis has been made. Firstly, in the uncommon cases with very acute onset it is proper to give sulphanilamide immediately on making a clinical diagnosis of hæmolytic streptococcal infection, but bacteriological confirmation is still an urgent matter. If the bacteriologist confirms the clinical diagnosis the treatment is, of course, continued. If the diagnosis is not confirmed it becomes necessary to review all the evidence before continuing with the drug. Conflict between clinical an bacteriological evidence is very uncommon in this particular type of case, because an infection so fulminating as to make twenty-four hours' delay in treatment inadvisable, is nearly always due to the hæmolytic streptococcus. Secondly, in cases showing clinical signs of peritonitis after Cæsarean section the diagnosis of hæmolytic streptococcal infection—and therefore the responsibility for treatment with sulphanilamide—may have to rest on clinical grounds alone. In these cases the organisms may have gained entry through the abdominal wound, and not through the birth-canal, so that it is quite possible for a hæmolytic streptococcal peritonitis to exist with negative bacteriological findings in the lochia. Thus after Cæsarean section negative bacteriological evidence from repeated vaginal swabs is no reason for withholding sulphanilamide if clinical evidence suggests a hæmolytic streptococcal peritonitis.

In the treatment of hæmolytic streptococcal puerperal infections a suitable dose for sulphanilamide (or similar compound) is 6 grammes in the first twenty-four hours, followed by 4 grammes in each subsequent twenty-four hours until a full course of 30 grammes has been given. If the clinical state of the patient is not by then satisfactory very careful consideration must be given before deciding to continue with further doses. The dangers and complications of chemotherapy have been dealt with by other writers in this series, so that it is not necessary to consider them here, but in puerperal cases it is seldom profitable to give more than a total of 30 grammes; if the patient is not well on the way to recovery by the time she has had 30 grammes she is unlikely to show any improvement with a larger total dose. On no account should more be given without first proving the absence of granuloleucopænia by blood examination.

The use of sulphanilamide has sometimes been advocated (and, indeed, practised in an irresponsible sort of way) as a prophylactic measure against hæmolytic streptococcal puerperal sepsis. I believe its use in this way to be undesirable because there is no good clinical evidence that it is effective, and there are reasons to believe that it may be harmful in some cases; but the main objection to this practice is that it is bad training and encourages slovenly thinking. There is one outstanding prophylactic measure that should be our constant aim in the prevention of hæmolytic streptococcal puerperal infection—viz., the provision of a streptococcus-free environment for the patient during labour and the puerperium. This measure is so simple in principle, so exacting in practice, and so lacking in dramatic appeal, that anything which may be used as an excuse for not paying meticulous attention to it must be regarded as a possible menace. When sulphanilamide is used as an excuse for neglecting the supreme prophylactic measure, it becomes a positive danger. On rare occasions, as for example when the patient in labour is herself suffering from a hæmolytic streptococcal infection of the throat, it is obviously impossible for the mother to have her baby in a streptococcus-free environment, and in these exceptional circumstances the prophylactic use of sulphanilamide may be justified; but if it is her husband who has the sore throat surely it is more reasonable that he should be banished from the scene, than that he should hand his wife the sulphanilamide tablets from the family medicine-chest.

It has already been pointed out that since the introduction of sulphanilamide, the hæmolytic streptococcus is responsible for less than half of the deaths from puerperal sepsis. What of the rest that are due to anærobic streptococci, staphylococci, B. welchii, B. coli, etc.? From the expe-

TABLE SHOWING THE RESULTS OF TREATMENT IN ALL CASES OF HÆMOLYTIC STREPTOCOCCAL PUERPERAL INFECTION ADMITTED TO QUEEN CHARLOTTE'S MATERNITY HOSPITAL ISOLATION BLOCK DURING THE SIX YEARS AND EIGHT MONTHS FROM JANUARY, 1933, UNTIL THE ISOLATION BLOCK WAS CLOSED AT THE OUTBREAK OF WAR IN 1939.

	Before the Use of Sulphanilamide, 1933–1935.			After the Use of Sulphanilamide, 1936–1939.		
	Total.	Deaths.	Mortality.	Total.	Deaths.	Mortality.
Total admissions of all types of hæmolytic streptococcal infection.	328	63	19%	393	20	5%
Infections limited clinically to the birth-canal.	152	0	Nil	297	2	0.7%
Infections with localised spread to lower abdominal peritoneum, pelvic cellular tissue, etc.	66	1	1.5%	51	1	2%
Infections with spread to blood-stream (blood-culture positive).	37	17	46%	36	10	28%
Infections with generalised peritonitis (proved at biopsy or at autopsy).	22	17	77%	5	3	60%
Infections with blood-stream as well as general peritoneal involvement (not included in the two previous groups).	31	28	90%	4	4	100%

The figures, and all other statistical data quoted in this article, have been obtained from the published Annual Clinical Reports of Queen Charlotte's Maternity Hospital.

rience of others in other branches of medicine I can believe that one ought to employ the new chemotherapy in puerperal infections due to gonococci, meningococci, or pneumococci, but I have yet to meet and recognise puerperal infections caused by these organisms. From my own experience of the common types of puerperal infection, I am satisfied that no useful purpose is served by extending the new chemotherapy in its present state beyond the hæmolytic streptococcal group.

Sector News

The Wildernesse Letter

When two young medicos find themselves residents in one of the Statelier Homes of England, is it not to be expected that they should confess to a certain degree of bewilderment? And believe us, dear reader, we do.

For the warm welcome we have received and the kind help everyone has given us to settle down comfortably, we are most grateful—doubly so when we appreciate how sad everyone must have been when Mr. Jackson left for Farnborough, and Mr. Martin for Dartford. Nature has added to the warmth of our welcome by her luxuriant autumnal tints around us. Soon the cold days and long nights of winter will have descended upon us, but we are well prepared, for we hear on all sides rumours of impending social events. The residents must, however, admit to a feeling of apprehension at the prospects of being called to join in a Paul Jones!

The amount of hard work that has been done here in the past five months by Mr. Kilpatrick and his collaborators must have been colossal, for one is struck by the air of smooth-running and efficiency that pervades the whole atmosphere of the Wildernesse. Much is still being done. Our new diagnostic X-ray plant will be working any day now, and the housing for the deep therapy apparatus grows daily before our eyes.

We are in splendid isolation here, with transport facilities that must be seen to be believed, but we trust our Guy's friends from all corners of the Sector will occasionally call in upon us here to see that we fail not in maintaining the highest Guy's traditions in this lovely and luxurious lazaret.

H. P. J.

Pembury Letter

It has been our misfortune again, as three months ago, to lose three residents. Howell Jones left us by bicycle and, if he surmounted River Hill successfully, is now walking the marble halls of the Wildernesse. His departure reduced his patients to such depths of grief that some were even reduced to venting their misery in verse. For the rest of us prose must be sufficient in which to express regret at his going. "Clotty" Beaton, too, who now dons the uniform of the R.A.M.C., will be much missed. He leaves behind him many a broken heart. While Ben Fowler, after only three months, leaves us with our bruised shins as, with his hockey stick, he goes in search of unwary legs at Orpington. In their places Charlton takes up the surgeon's knife, while Eckstein and Vulliamy share the medical beds. Owing to a rearrangement on the surgical side two H.S. jobs have now been combined, and this appointment is now so heavy that its holder is finding it much more difficult to get off every week-end.

The hockey season has come round again and a game answering roughly to that description has been flourishing on a field near Sherwood Park once or twice a week now for over a month. Enthusiasm has not been lacking, but we would welcome a little more support from the nursing staff, which at present turns up in quality rather than quantity.

A weekly news-sheet has lately been appearing in the hospital containing instructions, supplements to instructions, supplements to supplements, corrections and cancellations of the notices with which Sisters are wont to paper their duty rooms, and of the standing orders of House Officers which, unfortunately, went the way of Elijah one irresponsible evening. This is appearing printed on pink paper, but whether this is to put a rosy complexion on the more irksome requests or a method of deceiving the Minister for the Prevention of the Wastage of Paper to whom this colour is invisible we have not been told.

A large proportion of the readers of the "Pembury Letter" have asked why none appeared in the last *Gazette*. To both of these we would explain that while the prospective letter was in preparation a note was received from the Editor requesting that this present one should be our next, thus saving valuable space in the previous *Gazette*. Thanks to our invaluable rhinoceros hide a letter now duly appears.

G. L. L. R.

The Pharmaceutical Department

On Tuesday, October 28th, the Trustees of the Bernard Baron Charities Fund visited the Pharmaceutical Department which, by their generosity, has been completely reconstructed and re-equipped. The Trustees, accompanied by some of the Governors of the Hospital, made a close inspection of the department and expressed their approval of the improvements effected.

The work of reconstruction, which has taken some three years to complete, has been carried out in stages to minimise as far as possible any interference with the normal activities of the department.

The Dispensary has been approximately doubled in area by taking in the space occupied by the Manufacturing Laboratory, the latter having been transferred to the basement. There are separate laboratories for the preparation of sterile injections and the testing and assaying of the various bought drugs, etc., and the many preparations made on the premises. The stores for drugs and chemicals, surgical dressings, bottles, gas cylinders, etc., have been considerably extended and rearranged.

In the Dispensary several interesting features have been incorporated. Each Out-patient window has been arranged as a more or less self-contained unit which can be used independently of the rest, The ointment mixing bench consists of a sheet of black plate glass, very easily cleaned and convenient for the extemporaneous mixing of ointments. The jars of the more frequently required stock preparations are held in an inclined rack just above the bench. Self-closing bins are provided for bulky powders and a specially designed refrigerator ensures that biological preparations are stored under ideal conditions.

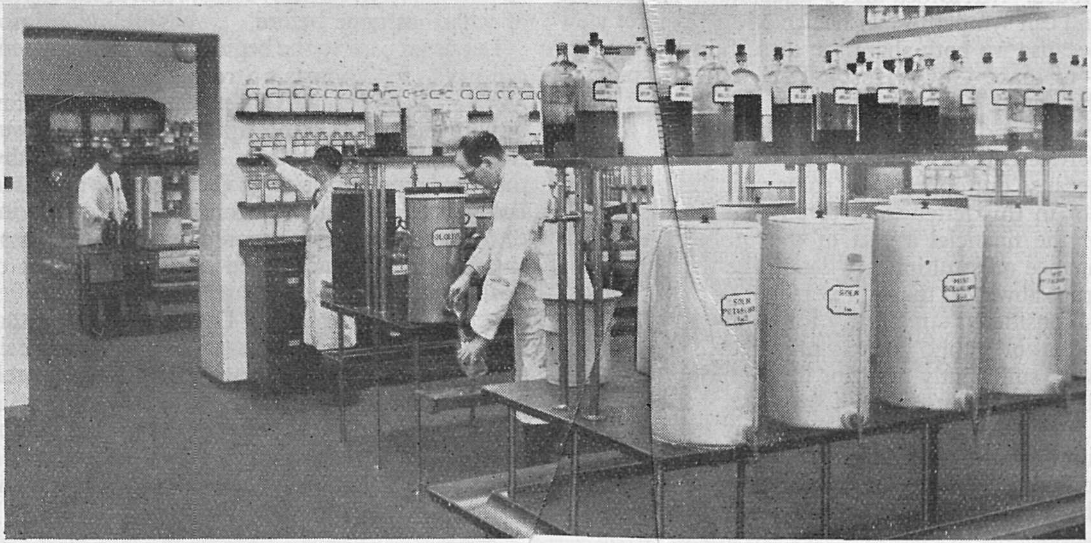
All the benches, cupboards, etc., in the Dispensary are of teak and the metal fittings of stainless steel. The walls and floor are tiled.

The Sterilising Laboratory contains an autoclave and an electric oven by means of which injections can be sterilised at any required temperature between 80° C. and 150° C. Facilities are provided for bacteria-proof filtration and the filling of ampoules under reduced pressure. A glazed working bench, which can be readily swabbed with antiseptic, is fitted. The air supply is filtered. Some 4,300 litres of injections were prepared and sterilised in this laboratory last year.

The Manufacturing Laboratory is completely equipped for the production of most of the official galenicals and many other preparations. The equipment includes a tablet machine, disintegrator, end-runner mill, tincture press, mixing machine, steam-jacketted boiling pans, drying cupboard, hot plate and two stills (one for the production of distilled water and the other for distillation under reduced pressure). Some idea of the work done in this section can be given by quoting the following production figures for 1940 :—

998,000	compressed tablets.
2,500	gallons stock mixtures.
3,000	gallons lotions, etc.
2,240	lbs. cataplasma kaolin.
1,500	lbs. various ointments.

The Dispensary and Laboratories together comprise a Pharmaceutical Department of which Guy's may be proud ; few, if any, other hospitals possess so completely equipped and up-to-date a department. The department is under the charge of Mr. J. Moore, Ph.C., who is well known to all students on account of his lectures on pharmacy. Mr. Moore is assisted by Mr. T. Barker. Messrs. S. F. Izzard and B. G. Gotts have charge of the manufacturing and of the sterilising laboratories, and the remaining assistant pharmacists are Messrs. J. S. Rutter, W. Jenkins and A. Berry.



By kind permission of "The Chemist and Druggist"

Correspondence

Rebuilding of Guy's

To the Editor of the GAZETTE.

SIR,—Mr. Brock's feeling of sadness at the prospect of losing the architectural characteristics of Guy's House in any future reconstruction will naturally be shared by all old Guy's men; since not to feel sadly the passing of any well-loved and familiar person or thing would be unnatural.

But in any new hospital building the first thing to be aimed at is efficiency, and to impose on the architect in advance the maintenance of certain specified features of the old building cannot but result in a compromise of the type from which Guy's has so often suffered before. The ideal hospital building is the one most perfectly suited to the work which it houses, and from that perfection it acquires beauty, while the preservation of ancient architectural features, beautiful or otherwise, seems to me to be no part of its function.

The tradition of Guy's is a thing of the spirit, and not of brick and stone, and that, as I see it, is what we must guard most carefully against damage during demolition and reconstruction if our heritage is to be safely passed on to those who will come after us.

Yours, etc.,
E. G. SLESINGER.

14, Devonshire Place, W.1.

To the Editor of the GAZETTE.

SIR,—I was much interested in the letter from my friend Mr. Brock on the subject of demolition and rebuilding on the site of Guy's House. Mr. Brock and I understand one another and can sympathise with each other's point of view because we both share the same fundamental aim —to make Guy's Hospital the finest hospital in the world. I must assume from his letter, however, that differences of opinion are bound to arise between us as to how this may best be effected because our approach is somewhat different. I do not in this letter want to enter into a discussion of the financial aspect of the problem, although finance must ultimately determine the issue. It is true, however, that if a personal or public project is considered sufficiently important and the individual or public body is prepared to fight and to work sufficiently hard for it, the money is usually forthcoming in the end.

Let us assume for the moment that up to the limit of the expenditure of three-quarters of a million pounds, finance is no object, and let us on this basis set out to achieve our purpose.

The first meeting of the Post-War Problems Committee is shortly to take place and one of the questions that it will have to consider is the rebuilding of Guy's in the Borough or in the country. As I see it, there are three possibilities:

(1) To rebuild the main hospital in London and to acquire an annexe in the country.
(2) To confine the hospital to London as before.
(3) To build a new hospital outside London and to retain an out-patient clinic and an emergency centre on the present site.

Those members of the Committee with whom I have discussed these matters are approaching this question with completely open minds, but I am bound to say that the more I think of it the more I incline to the view that the first of the above possibilities will prove the most practicable solution. If this turns out to be the case then the problems which Mr. Brock raises will have to be faced.

Mr. Brock rightly calls for every endeavour to be made to preserve as much as possible of our lovely eighteenth century heritage, and he reminds us how we are not only guardians of the past but trustees for the future. We have to plan that is, not only for our sons and our grandsons, but for the next two to three hundred years. Now architecture is in one respect unique amongst the arts. In painting it was possible for Cèzanne, Monet and Van Goch to flourish without robbing posterity of the beauties of Raphael, Rembrandt or El Greco; in music, Mozart's stately measure ushered in the glory of Beethoven. The polished grandeur of Brahms was not tarnished by the tempests of Bayreuth. In architecture, however, advance must necessarily come, often at the expense of what has gone before.

Let us go back to the beginning of the eighteenth century. St. Thomas's Street is cobbled; on the north side of the narrow pavement are the low-buildings of St. Thomas's hospital; on the south side is a row of Jacobean dwelling houses, their timbered upper stories projecting over the street. In the creek which runs from the Maze pond into the Thames, a brig is moored and her twin masts, shrouds and ratlines stand out clear against the Eastern sky. Fifty years later the south side of the street is transformed. The lovely old Stuart houses have gone; their carving, their massive doors and their tortured and twisted beams relegated to the scrap heap; the gentle protests of the antiquarian have been ignored and in the place of these picturesque relics a new-fangled stone erection has been built. The classical revival is the rage and, flouting the honest burghers of

Southwark, appear the Ionic columns, pediment and plinths of a foreign clime. As the years pass the new building fits more properly into the scene, the Gothic revival appears and the old classical features of Guy's House seem homely, strong and natural by contrast. Generations of Guy's men come and go, and the affection for the old building grows. Now when we contemplate the possibility of losing these things we find that their intrinsic beauty and the associations which they hold for us are greater than we knew.

Mr. Brock makes a plea for the preservation of the quadrangle, the façade and the colonnade. I make a plea for the building of the finest hospital possible on the available site. The quadrangle is a space and an amenity which would naturally command the greatest consideration in such a scheme, but I doubt whether the façade or the colonnade could be preserved with either material or æsthetic advantage. Advances in hospital planning and organisation have been so considerable even in the last thirty years that it is extremely unlikely that an efficient organisation to serve the needs of the next few hundred years could be carried on in buildings even remotely resembling our present ones. It might be possible to incorporate some of the familiar features in a new design, but I fear that this would probably lead to a hybrid affair without achieving either æsthetic or practical unity. Mr. Brock states: "Almost all our most ancient and treasured buildings are a blending of, not two, but several periods of architecture and design." No doubt Mr. Brock is thinking of those instances of the harmonious blending of Norman, Early English, Decorated and Perpendicular styles, but despite the fact that these styles are separated in period by as much as four hundred years, there is architecturally a greater affinity between them than between Georgian buildings and those of the present day. This difference is due chiefly to the introduction of steel and concrete as a method of construction. We can appreciate the difficulty of such a task as he proposes if we attempt in our minds to blend, for instance, the old Adelphi with the new London University buildings. If an architect of genius can be found to effect this symbiosis so much the better, but when our responsibility to the future is considered we must not let our designs be influenced by the nostalgia of an ever dwindling number of Guy's men. I agree with Mr. Brock that the best design would probably be obtained by throwing it open to competition. On the other hand, there are certain disadvantages to this method which, while not insuperable, must be considered. Firstly, I understand it to be a regulation of the Royal Institute of British Architects that the selection of the winning design in such a competition is vested in their representatives and does not rest with the promoters of the scheme. Secondly, as has happened recently in the case of a London hospital and (with, however, the happiest results) in connection with Liverpool Cathedral, the winning design may be the work of a young architect of talent or even genius but without practical building experience, so that another architect may have to be employed at additional expense to hold a watching brief on the proceedings. Harmonious co-operation between these two persons is, moreover, not inevitable. Such a state of affairs is the more likely to arise in that a busy architect of established reputation is less likely to spend time competing for a prize when he can be more profitably occupied in other ways.

There remain two points upon which, from reading his letter, I believe I differ fundamentally from Mr. Brock. I feel that he fears (perhaps with some excuse when one sees many of the latest examples of hospital architecture) that this generation will be unable to build a hospital worthy of our great traditions. I deprecate most vehemently this attitude of defeatism. If in our generation there cannot be found men and women of vision and genius, men and women who can lead this country of ours back to greatness, who can see the splendour of a "brave new world" and who have the vigour and the eagerness to build it, then we are not worthy of those traditions which Mr. Brock, with every other right-thinking servant of the community, is anxious to preserve. I refuse to believe that this generation has not the strength to stand on its own feet and, whilst cherishing the traditions of its forefathers, to create a glory of its own.

Lastly, there has been a tendency to stigmatise as vandals those of us who wish to see a fresh start made with plans unhampered by the restrictive fetters of the need for preservation. Architecturally the first quality of beauty is fitness. We admire Lutyens' Battersea masterpiece because, besides being essentially satisfying in line and form, it looks precisely what it is meant to be—a power station. We can appreciate the loveliness of Winchester and Canterbury together with Liverpool cathedrals because old or new they subserve perfectly the functions for which they were built. It is otherwise when we view structures which functionally have outlived their era and, however great is the intrinsic beauty of our buildings, if by their unsuitability they stand in the way of progress then, however we may regret their passing, they will have to go.

Yours, etc.,

H. J. B. ATKINS.

To the Editor of the GAZETTE.

SIR,—All who share Mr. Brock's view that every effort should be made to preserve the best festures of the Georgian part of the hospital must feel grateful for his letter on that subject in the *Gazette*. I write to add my name to those of other old Guy's men who agree with the plea which he so thoroughly—and tolerantly—expounded in the last number.

The clarification of the position which he has effected by pointing out the three features most worthy of preservation is most helpful, and makes it abundantly clear that the reconstruction of the surgical block does not necessitate the total loss of the most beautiful parts of the Hospital. The quadrangle, the façade and the colonnade constitute, for most Guy's men, the structural identity of their Hospital.

Their loss would not only be an æsthetic one. Quadrangle and colonnade, where Staff, Students, Nurses and House-officers meet and enter and leave the Hospital, play their special part in the formation of a Guy's life, as distinct from a Bart.'s or Mary's life, in the same way that the architectural differences between St. Andrews and Birmingham Universities help to mould the life at those institutions in different patterns.

If these parts of the Hospital are held—as I believe they are—in widespread and considerable affection, Mr. Brock's letter should produce in your columns a manifestation sufficiently material to check any materialist who mistakes their value and importance.

I would like to add how very much I enjoyed his most apposite reminder of the encomiums which, in Queen Victoria's day, greeted the appearance of Hunt's Block and the College, when they were hailed as the most modern and efficient of buildings. Their current rating by these standards is known to all. The quadrangle, the façade, and the colonnade do have to be judged by standards of efficiency and modernity, though they impair neither, but have always been a source of pride and pleasure to members of the Hospital.

I am, etc.,
PATRICK CLARKSON.

To the Editor of the GAZETTE.

SIR,—Many must have read Mr. Brock's admirable letter with surprise and gratitude—surprise that an irrevocable step should be lightly contemplated, and gratitude that he has raised a timely warning voice.

That the Enemy and the Official Conscience have demolished the east wing of the quadrangle was unavoidable and must be accepted. To follow this with further and voluntary destruction would appear to be as unwise as to operate on an injured man while the initial shock is still present. Is any action wise at the moment? Presumably the new surgical block is for use after the War, for, with the present decentralisation of the Hospital's forces, it can hardly be needed now, and, with the possibility of further damage to come, it would be folly to build it now. Who can foresee under what conditions the Hospital will then work, and what needs the surgical block must then serve? The fallacy of "planning" without the facts is a national habit and pastime from which, and for which, we suffer daily.

But even when plans can be made, the wishes of those that care might be, and I feel should be, considered. Though it would be wrong to let sentiment and pride dictate to the essential purpose of the necessary changes, it is also wrong to allow technical considerations to hold unrestricted power. Good architecture is surely a proper balance between the æsthetic and the practical, and a compromise to conserve the best of new and old is not impossible. It is a problem which would attract, and should be offered to, the best talent available.

Yours, etc.,
CHARLES BAKER.

R.A.M.C., 11th General Hospital,
Bracebridge Heath, Lincoln.

To the Editor of the GAZETTE.

SIR,—I should very much like to associate myself with Mr. R. C. Brock in appealing for very serious consideration before further demolition is carried out on the West wing of the front quadrangle.

I should also humbly like to mention that I thoroughly endorse all that Mr. Brock has expressed in his article in the last issue of the *Gazette*, and I feel absolutely certain that the majority of old and new Guy's men and nurses will agree with me.

Yours, etc.,
A. E. GRACE,
Capt. A.D. Corps.

57, Halfway Avenue,
Luton, Beds.

To the Editor of the GAZETTE

SIR,—Mr. Brock's thoughtful letter in your last issue deserves the utmost support. Visiting Guy's in the early summer it was possible to see the old buildings surrounding the quadrangle exposed to their best advantage. No longer overshadowed by grimy warehouses, they seemed to have shed many weary years and stood out in all their former magnificence among the ruins of the unlovely Borough.

Unhappily though, such restoration was short-lived and their symmetry is now spoiled by the damage to the Superintendent's House and adjacent buildings. The Court Room itself, like a nearby bridge, one seems to remember had its downfall foreshadowed more than once, and reports of its stubborn resistance to the house-breakers is only proof that architects, equally with physicians, can be confounded by post-mortem examination.

However, let us hope that the few months during which these old buildings were seen at their best will have been enough to ensure all possible efforts for the preservation of their form.

Rebuilding there must be and no doubt many structural alterations in design will have to be accepted so as to allow the new building to be laid out as a modern surgical block, but I agree with Mr. Brock that it should not tax excessively the ingenuity of architects to retain something of the style and proportions of the original buildings, as well as its central feature, the colonnade.

The suggestion of leaving the design open to competition is obviously sound, but the importance of selecting the winner for purely architectural attainments can hardly be over emphasised.

Yours, etc.,
ADRIAN HILL.

To the Editor of the GAZETTE.

SIR,—There can be but little to add to Mr. Brock's excellent letter on the "Rebuilding of Guy's." He has very wisely realised that in a few months' time comments or suggestions from lovers of fine buildings may come too late to prevent the destruction of further beauties to make way for more Nuffield House " brick-boxes." Therefore I hasten to uphold the plea for clean, bright and well-equipped interiors, while preserving the noble outer walls. Our forefathers made buildings glorious to look upon, but abounding in dark and dusty corners—both lowering to the spirits of ill patients and inconvenient for doctors and nurses. There should soon be opportunity for remedying the defects of the old without destroying its good qualities.

I trust that Mr. Brock's appeal will produce enough replies to settle a policy for future rebuilding, and that the authorities, when the time comes, will straightway set about the finding of an architect competent to perform the task.

Finally, might it not be possible to rebuild the east wing as it was before its destruction? Surely modern architects and builders *could*, if it were demanded, make some approach to the craftsmanship of more primitive but less ugly days.

Yours, etc.,
NORMAN A. PUNT.

County Hospital,
Farnborough, Kent.

To the Editor of the GAZETTE.

SIR,—As a comparative newcomer to the Hospital I would not have the temerity to write this letter if Mr. Brock had not invited those of us who feel deeply about the rebuilding of Guy's to support him.

War time, and especially this war, offers ideal opportunities for the fanatical modernists and tradition haters to destroy everything they can lay hands on almost unquestioned, and I feel that they get away with a lot before the more moderate and less iconoclastic majority realise just what is happening. Unfortunately, as in the case of the East wing of the front quadrangle, it is often too late to stop the damage. Looking round at the number of burnt out, and at the best of times ugly buildings round about Guy's which have not yet been demolished nor fallen down after nearly a year of bombing, I cannot believe that there was any necessity for the sinister speed with which they began pulling down the East wing, nor that any very strenuous efforts were made to preserve it from the demolition squad. Were we not told before the war that the Surgical Block would collapse if a bomb fell anywhere near?

The East wing is lost to us, but I do beg, that when the time comes for rebuilding, the front quadrangle be left, together with the front façade and colonnade, and that the old East wing is replaced by a building that blends with the old and maintains the symmetry of the quadrangle. Such work is not impossible, and many of the Cambridge colleges, to quote one example, have successfully mixed the old with the new.

Guy's is not just a hospital and nothing more. It is a home of medical tradition and learning. We remember and cherish the great Guy's men of the past, physicians and surgeons, and it is not fitting that all visible connection with them should be lost. Let us build fine new wards of steel and glass, or what you will, not forgetting that they probably will be out of date in twenty years, but let us keep some outward signs of our great history and traditions if only as an inspiration to future generations of Guy's men.

Yours, etc.,
H. C. STILL.

The Student's Hostel,
Guy's Hospital, S.E.1.

Sport

Rugby

By defeating Northampton on their own ground on November 8th by 9 points to nil, Guy's Rugby XV created a record which may have passed unnoticed by many Guy's rugger enthusiasts. They have played seven games, all of which have been won, scoring 125 points against 33, and it is necessary to go back to the sparkling days of 1920–23 for the nearest approach to such an impressive opening to the season.

In 1922–23 Guy's went through five matches and were beaten by Gloucester on the sixth, and in 1921–22 Gloucester again were the first to beat us on their own ground in the third game, although Guy's went on to win their next seven games.

Allowing for the strength of the opposition being below peace-time standard, the performances of Guy's 1st XV deserve special praise. Mullins and his team are to be heartily congratulated on their achievement, which has been brought about by hard work and enthusiasm and the gradual blending of junior players into the 1st XV during the past three seasons.

Without being unduly optimistic, results prove that Guy's rugger is definitely on the up-grade and all good wishes for their continued success will go out from all Guy's men.

Hospital Information, etc.

Notices

1ST XV.—ADDITIONAL FIXTURES.

Season 1941–41.

Date.	*Opponents.*	*Ground.*
Wed., Nov. 26	St. Bart.'s Hospital	Chislehurst.
Sat., Dec. 20	A Navy XV	H.O.P.
Sat., Feb. 14	London District XV	Richmond.

Pass List

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

July, 1941.

M.R.C.P.

P. H. Denton, M.D.

UNIVERSITY OF OXFORD.

October, 1941.

M.D.

Eric Smith.

Papers by Guy's Men

Rushton, Martin A. Cases of Accelerated and Retarded Dentition. *Brit. Dent. J.*, 1941, **71**, 277.

Changes of Address

J. S. Batchelor, F.R.C.S., 97, Harley Street, W.1. (Tel.: Welbeck 8395.)

Bryant Bell, M.R.C.S., L.R.C.P., Box 96, Standerton, Transvaal, S.A.

Miss I. G. Cousins, St. Stephen's Hospital, Delhi.

G. G. Ellis, Major R.A., Lloyds Bank, Ltd. (Cox & King), 6, Pall Mall, S.W.1.

M. C. Hart, Captain A.D. Corps, 94, Cadzow Street, Hamilton.

F. G. Lloyd, F.R.C.S., 19, Ashley Gardens, S.W.1.

John Lubran, Lieut. R.A.M.C., Officers' Mess, Tadworth, Hants.

C. S. Pitt, Captain R.A.M.C., 135 Field Regt. R.A., c/o A.P.O. 1635.

Howell Richards, Flight-Officer R.A.F.,, Pembroke Docks, South Wales.

R. G. Siggers, Flight-Lieut., R.A.F. (V.R.), Cartref Roseacre, Bearsted, near Maidstone.

W. H. West, L.D.S., R.C.S., "Mayfield," Dale Road, Claygate, Surrey.

G. N. Wood, Captain, R.A.M.C., No. 4 Command, Troon, Ayrshire.

H. M. Worth, M.R.C.S., L.D.S., 273, King George Drive, Victoria, B.C., Canada.

Appointments

A. D. Marston appointed an additional Examiner for the diploma in Anæsthetics.

Births

CORKER.—On October 27th, 1941, at Ballyhaunis co. Mayo, Eire, to Margaret Mary (nèe Ronayne), wife of Flight-Officer R. M. Corker, R.A.F.V.R.—a daughter.

STEVENS.—On October 30th, 1941, to Iris (nèe Chester), wife of J. H. Stevens, L.D.S., "Yelverton," Harrow Road, Wembley—the gift of a daughter (Janet).

Deaths

VIAN.—On October 16th, 1941, Silvia Helen Vian, S.R.N., Q.A.I.M.N.S. (Guy's 1918–1922.)

WHITBREAD.—On October 29th, 1941, at Cooper's Hill Lodge, Englefield Green, Surrey, Francis Pelham Whitbread. A Governor of the Hospital 1910–1941 and Treasurer 1924–1935.

Eds. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV | *29th November* 1941 | *Number* 1392

PASSIM

PROFESSOR JOHNSTON has, in this issue of the *Gazette*, provided an authoritative reply to Mr. Brock's letter and the flow of correspondence which it has stimulated in recent weeks. We are informed that the Court's decision to permit the demolition of the East Wing of the Quadrangle was based on the advice of four independent and well-qualified architects ; in spite of their apparent solidity to the amateur's eye, the oblique cracks spreading through the gutted walls made them unsafe, and thus the " suspicious " haste with which they were pulled down is accounted for by the Court's desire to safeguard the passing public against possible accidents and, at the same time, to save the Hospital a considerable sum of money which demolition at a later date would have entailed.

Whether or not it is because we have projected the pleasant memories of peace-time Guy's into the comforting beauty of the Colonnade and Façade, there seems to be present in the minds of many the belief that the spirit and tradition of our Hospital will be jeopardised if certain of its Georgian remnants are not retained as part of the rebuilt Guy's. The long series of famous contributions that this Hospital has made to the world of surgery and medicine, in fact its tradition, has never been dependent upon the design of its buildings, and while we tend to associate the success of the past with what is left of it at present, we must strike out and make further clinical discoveries and not squabble over the X-ray apparatus, the electrocardiograph and other departments being housed in fresh chromium-plated quarters as opposed to a renovated establishment constructed behind already existing beauty spots. In any case what structures remain and what is more important the conditions prevailing at the end of the War will probably influence the correct policy to be adopted much more than the present discussion.

The backbone of Guy's has been the quality and inspiration of its teaching and teachers. What does it matter if the surgical ward clerk has to carry his patient up an uncertain lift that requires real skill to bring level with the floor and then to wheel the wobbly trolley along dark and twisting passages ? The real point is that he has just assisted and been educated by one of the ablest surgeons in the country. Surely this is far better than standing behind a glass-fronted gallery and watching the operation *via* the reflection from the mirrors in the operating lamp. If this is the picture of the Guy's to come, a picture which is fact in many other hospitals, then it would be best for Guy's, as such, to cease to exist altogether. There can be scarcely a Guy's man who does not really love our façade and colonnade ; preserve these by all means, even preserve the colourful Whitbread in the front lodge ; but there are many factors and ominous possibilities which make such considerations immediately vain and unprofitable.

* * *

IT is a thrilling experience to wander through the various huts that compose some of the base hospitals of the Guy's Sector ; many of them bear familiar names such as Wilks, Bright, Lydia, Dorcas, etc. Inside one sees the trim and neat Guy's nursing staff performing in their own efficient way ; here and there is a ward clerk carrying out his responsibilities towards his respective patients. In the mornings one may chance upon a registrar carrying out the enviable task of training his firm of students. In the afternoon the honorary staff hold their ward rounds or operating sessions, and so in distant huts clinicians and students alike gain new experience and information. If under such crude conditions the standard of medicine and surgery is being maintained, certainly it does not matter what style the stones and bricks of the future Guy's assume. Make it as beautiful and spacious as possible, retain as much of the old structure as circumstances permit, but, above all, we must strive to maintain that close association between clinician and student at the bedside of the sick ; this and this only is the real Guy's.

Chemo-Therapy and the Middle Ear Cleft

By T. B. Layton, D.S.O., M.S.

To prevent, or to cure, without harm. These are the problems before us. Every inflammation of the middle ear cleft is a part of a rhino-pharyngitis. If, then, we exhibit chemo-therapy in every case of acute inflammation of the throat shall we limit the number in which otitis media or mastoiditis arise? As yet we do not know, nor shall we ever be sure; for, leaving out the difficulty that the factors in all problems of the upper respiratory tract are so numerous that statistical surveys are of little value in diseases of this region, we know nothing of the anatomico-physiological variations upon which extensions into the middle ear cleft of inflammations of the naso-pharynx depend.

But will it prevent the occurrence of suppurative otitis media with perforation of the drum-head? This may be capable of a statistical survey if the operation of paracentesis is never performed; but who, in the name of science, would be prepared to refrain always from this operation, however seldom he may think it necessary?

When we come to discharging ears we are on surer ground. While we cannot, in the bustle of everyday clinical life, dispense with the pithy terseness of the old terms " acute " and " chronic " suppurations of the middle ear cleft must to-day be studied bacteriologically and a primary subdivision made into "naso-pharyngeal" and " cutaneous " infections. The latter are always consequential on the first, the naso-pharyngeal organisms are killed off by the natural processes of the body and replaced by cutaneous ones from the external auditory meatus if healing of the mucous membrane has not occurred. Chemotherapy should be employed with ear discharge due to naso-pharyngeal inflammation of the middle ear cleft with a view to aiding the natural process of the body and so to prevent extension in time or in space.

Curative chemo-therapy therefore overlaps preventive. Let us now consider whether, in addition to doing good, chemo-therapy can possibly do any harm. In my opinion, undoubtedly, by allowing a dangerous condition to remain, and to progress slowly while masking those general symptoms upon which we have come to determine the indication for operation. Mastoiditis, to-day, is not a question of local tenderness or of retro-aural swelling, but of an assessment of all the symptoms local and general, and the latter depend upon the absorptions of toxins or of organisms from the osseous tissue or from the lateral sinus. The chemo-therapeutic drugs cause the death of micro-organisms in the blood, in the cerebro-spinal fluid, and in living tissues; but not in dead ones. Now pus is dead tissue and blood-clot is dead tissue. When pus is on the surface of the mucous membrane and can be caused to flow away the mucous membrane underneath will recover. In the ear this is effected as a temporary measure through the drum-head; but in every case the final recovery results from the re-establishment of Eustachian drainage. Now that we have drugs that will aid the mucous membrane to recover, attention to this has become more important than ever in the treatment of these cases. But if the pus is in the tissues as when there is an osteo-myelitis, the organisms are not harmed therein; the moment they obtain access to the bloodstream they are. Now it is this access that causes the body to react by all those changes that we call fever, of which pyrexia is the most easily assessed, and upon which we have come to decide that operation is necessary. The chemo-therapy drugs mask these symptoms without touching the osteo-myelitis. When this only is present the patient recovers with a permanently damaged tissue in the mastoid bone. This osseous tissue must be removed by operation before the cutaneous organisms have replaced the naso-pharyngeal ones. If there is no extension to surrounding structures no harm results by delay in operation and the final results should be better, as the operation is performed in the period of reaction and repair, and not in the acute invasive stage. The important thing is that it must be done by the end of the eighth or ninth week from the date of perforation of the drum-head, this being the date at which the secondary invasion takes place, so far as our present-day knowledge tells us. A great increase of this operation, which may be called the " clearing-up " mastoid, is likely to occur as the result of chemo-therapy with benefit to the community by the prevention of chronic disease. The other route of absorption is by the lateral sinus; and it is this condition which has always been hard to determine and has been made more so by these drugs. Sinus absorption is indicated by a sudden rise of temperature, a dirty tongue, and that general appearance of the patient that we sum up subconsciously and say, " He looks ill." Nature's reaction to this absorption is to thrombose the sinus. If at this stage the factory of organisms in contact with the sinus is removed all will be well. It is quite unnecessary to remove Nature's clot only to replace it by a surgical one. If, however, the factory of organisms is left, one or both of two things may happen. The clotting may spread along the sinus in either direction for a considerable distance, and from the sinus into protecting veins. There there then arise conditions such as that described by Dr. Symonds as otitic hydrocephalus. It will be interesting to see whether there is any increase in this type of case as a result of chemo-therapy. If there is it is probable that further syndromes will become recognised by the neurologists according to the tributary vein involved and the part of the brain that it drains.

Alternately the clot in the sinus may become infected and break down into pus so that the clot itself becomes the factory of organisms. While this is happening no symptoms will arise until the breaking down catches up the extension of the clot; there is then an excursion of organisms into the bloodstream that is devastating and the surgeon is very proud if his patient survives. Sometimes the suppuration extends to the vessel wall and there is a true thrombo-phlebitis of the lateral sinus. These cases are probably worse even than the former.

We see, therefore, that in naso-pharyngeal inflammations of the middle ear cleft we have so to use our chemo-therapy in order to gain the maximum benefit without losing lives by masking symptoms of sinus absorption. I think we should always work on a course, and not merely put the patient on to the drug. If at the end of that there is no amelioration, it may be admissible to continue, or it may be advisable to operate. It is a matter of clinical judgment at the moment. If the course has been successful in relieving the symptoms, and these recur in about forty-eight hours, it may be admissable to repeat the course or it may be advisable to operate. It is a matter of clinical judgment at the moment. But if, after the second course, the symptoms again recur, I think that anyone who advised against operation would be incurring a grave responsibility.

I think that sulphonilamide should be the routine drug. In the great majority of cases the hæmolytic streptococcus is the invading organism. It is not scientific to employ a drug that may be effective in the small remainder of cases if thereby you mask the symptoms in a greater number, and that is what sulphopyridine does. It makes the patient "look ill," which is one of our three symptoms of sinus invasion and it makes him vomit. Now vomiting is always a serious symptom in ear disease. Exactly what it means I do not know, but I believe it is due to some vascular disturbance of the cortex of the brain, and therefore indicates thrombosis of some cerebral tributary veins of the lateral sinus. It may compel us to operate quite wrongly. My last mistake was to open the mastoid in that rare combination of paratyphoid and otitis media. I said at the operation that there was nothing in the ear to account for the symptoms, and the diagnosis of the general disease was made from the culture taken at the operation.

This will serve to show that those who have had experience are in great difficulties as the result of the coming of chemo-therapy. Just as they were beginning to think they knew something of a protean disease they have to go back and re-orientate the whole of their approach.

This is well illustrated in the meningeal insolvement of the naso-pharyngeal inflammations of the middle ear cleft. Before the coming of chemotherapy these were the most urgent cases as to time in the whole of surgery. Every half-hour lost without removing the factory of organisms in contact with the dura diminished the chance of life to the patient. We otologists were just beginning to get this principle across to the medical profession as a whole when chemo-therapy came in. Have we to reconsider our approach and treat the meningeal invasion first and deal with the factory of organisms after. I believe we shall on the analogy of cerebro-spinal. The change in this terrible disease as the result of chemo-therapy is the most dramatic thing that I have known in the forty years that I have been studying medicine. It no longer terrifies; soon it may not even frighten. We have every reason to suppose that chemo-therapy can be made to control the hæmolytic streptococcus in the cerebro-spinal fluid as it is controlling the meningococcus. But there the analogy ends. In cerebro-spinal meningitis there is no factory of organisms pouring more microbes into the fluid; in otitic there is. It is not a question of operation *versus* chemo-therapy, but of priority between the two. If the patient is fit to stand it, operation should be done forthwith; but there is no longer the need to operate with diminished efficiency late at night with an imperfect technique.

The final result of the dry ear must to-day be considered in this as in the other types of mastoiditis. If the patient is too ill to stand operation this should be deferred. It is a matter of clinical judgment at the moment, but if the operation is deferred the removal of the factory of organisms should be performed at the first possible moment.

When the naso-paryngeal inflammation has been replaced by the cutaneous one it is known as chronic otitis media. Except in a limited number of cases where, at some time in the life-history of the human being, Nature cures the disease herself, this is an incurable disorder. There is no reason to suppose that chemo-therapy will be more efficient than routine tonsillectomy, crippling operative surgery, or the devoted care of selected members of the medical and nursing professions over long periods of the child's life.

While applauding the latter and asking them to continue, the sooner the medical profession as a whole recognises the incurability of chronic ear disease, it will realise the importance of getting every case of naso-pharyngeal inflammation of the middle ear cleft well within eight weeks of the rupture of the drum-head. The advent of chemotherapy should make it possible to eliminate chronic ear disease and its results from the nation with as much certainty as it is possible to eliminate the results of rickets.

The Interpretations of Dental Skiagrams by the Doctor

A Clinical Lecture delivered in the Medical School, Guy's Hospital, on Tuesday, 23rd September, 1941

By F. N. Doubleday, M.R.C.S., L.R.C.P., L.D.S.

GENTLEMEN,—When using dental skiagrams as an aid to diagnosis the first step must be to know accurately normal appearances. One must judge the extent to which a skiagram gives a correct picture of what it purports to represent. In a dental skiagram the angle at which the tube is set, the curve of the jaws, and the amount of lime salts present in the bone affect the appearance of the picture. So does the hardness of the tube and the exact time of the exposure. The angle at which the patient's head is set and the temperature of the developer also make real difference to the result. It is only a surgeon who constantly operates on the conditions seen in a skiagram and who thus comes to check his readings by clinical experience who can form a true estimate of the real meaning of a skiagram. The normal appearances seen are—(1) Definite lines representing the compact bone which covers the maxillæ, including the surfaces of the alveolar processes and which extends as continuous lines of compact bone, the linea dura, lining the tooth sockets; (2) by the cancellous bone which appears as a sharply defined network, the mottled or maculated appearance of normal cancellous bone; (3) the roots of the teeth which should be sharply defined, and be separated from the linea dura by a fine but definite space, about 1–2 mm. across, occupied by the soft tissue of the periodontal membrane. Each tooth varies in the shape, length and in the number of its roots. The bony foraminæ about the jaws show in skiagrams and must be recognised. The mental foramen lies between the premolar teeth or sometimes apparently at the apex of the root of one of them in which situation it may be mistaken for a pathological appearance. Similarly, the anterior and posterior palatine foraminæ may sometimes be mistaken for abnormal areas. In the mandible the inferior alveolar canal is clearly defined as far forward as the mental foramen, Dr. Worth has described vertical channels which are frequently seen in the incisor region of the mandible. They probably convey blood vessels, lymphatics and nerves, but no satisfactory series of microscope sections has yet been made to demonstrate their real nature. In the maxilla the compact bone lining the maxillary sinus forms an undulating but clearly defined line. In an acute alveolar abscess there is little to be seen in a skiagram. The outlines may be less sharply defined, but the condition has been acute and there has not been time for bony changes to take place. In a chronic abscess the absorption of toxin has been going on slowly for a long time. This stimulates the soft tissue of the peridontal membrane to form giant cells, osteoclasts and these in their turn absorb the bone. This cavity is known as a rarefaction area and forms a clear space at the end of the root. Sometimes this clear space is bounded by compact bone formed as a reaction to injury around the abscess. Dr. Weston Price has shown that teeth presenting such appearances have a low grade of infectivity owing to the bactericidal properties of the cells and fluid lying within the tissue lining the area. This observation has been confirmed by Mr. Bulleid. Dr. Price considers that a much more dangerous condition is that in which no reaction of the tissue surrounding the apex is seen. In these cases the bacterial toxins drain into the blood stream unchecked by such a defensive wall as exists where a granuloma is present upon the end of the root; such radiographic appearance is therefore of serious prognosis. In other cases there is a gradual deep sclerosis of the bone around the end of the root. Weston Price, working in the Crile Clinic, in Cleveland, Ohio, considers that his cases show that this is a definite indication of an acquired susceptibility or sensitisation to disease. This he has worked out in relation to arthritis, as shown by the accompanying table.

Radiological evidence of infection is sometimes present when a patient is edentulous and appears to have no teeth, such infection is termed "residual infection." It may result from the presence of buried roots, broken in previous extractions. It may result from the retention of infected granulation tissue when the tooth has been cleanly removed. *This is due to the fact that infected soft* tissue at the end of a tooth root causes the absorption of the surrounding bone so that prolongations of soft tissue project into channels in the bone, and remaining adherent to the bone when the tooth is removed, blood clot is formed above and calcification goes on in it so that the alveolar bone heals over, leaving *this infected soft tissue buried* so that all absorption of toxin goes on into the blood stream. Cysts formed in connection with teeth are seen as cavities surrounded by a regular definite ring of compact bone. A tooth is sometimes removed without the presence of the cyst being recognised. The cavity becomes infected and a suppurating cyst remains, from which absorption of toxin takes place. When teeth have been extracted the alveolar bone reforms and becomes covered with compact bone, which shows as a continuous line upon its surface. In place of this normal appearance skiagrams may show an irregular or "feathered" margin to the bone. This is evidence of an infected osteitis due to the presence of streptococci remaining in the bone.

Nothing is more difficult for the doctor to judge correctly than skiagrams of chronic general periodontitis (pyorrhœa alveolaris). There is usually a mixed infection present which may be of very low virulence. It has often been present for many years, during which the patient has developed a high degree of immunity to the infection. When wholesale removal of teeth is undertaken there is a serious loss of masticating power, resulting from the use of an artificial denture as compared with the patient's own teeth. The taste of food is also impaired, and Pavlow has shown how important this is to the secretion of the digestive juices. It will be seen, therefore, that these cases need careful joint consideration by the doctor and the dentist, and that the decision must be based upon the clinical and bacteriological *findings as well as the skiagrams.* When the teeth are present the surface of the alveolar bone is seen to be covered by a line of compact bone. This passes in a straight line between the premolars and molars; between the incisors it normally forms a point or gothic spine; it is seen as an uninterrupted line, the linea dura, round the sockets of all the teeth. Chronic general periodontitis commences as an infective process, resulting from the growth of bacteria in food wedged in the interdental spaces between unduly crowded teeth. As the toxins from these areas are absorbed, liquefaction of the superficial tissues occurs, then osteoclasts are formed and the absorption of bone begins. This first shows in a skiagram by a cup-shaped absorption of bone upon the alveolar margin between the teeth. Later it is seen that the space between the root of the tooth and the compact bone, the linea dura, lining the socket is becoming wider, indicating inflammation and thickening of

WESTON PRICE GROUPING OF ARTHRITIS.

	GROUP I.	GROUP II.	GROUP III.
	Non-susceptible.	Acquired susceptibility.	Inherited Susceptibility.
X-rays of jaw	Widespread alveolar absorption and large translucent apical areas.	Condensing osteitis about extensive rarefying osteitis, indicating high defence, breaking down.	Condensing or slight rarefying osteitis.
Blood calcium	Normal or high	Below normal	Low.
Bactericidal efficiency of the blood.	High to streptococci and other organisms.	Below normal	Low.
Tendency to general disease.	To arthritis, slight. To tubercle or malignant disease high.	To degenerative (but not proliferative) arthritis. Tendency to sensitisations such as asthma, hay fever, hypertrophic rhinitis.	Tendency to streptococcal and rheumatic diseases such as chronic heart, kidney, digestive tract, acute rheumatism, tonsillitis, but seldom tubercle or carcinoma.

the soft tissue of the periodontal membrane. Then it may be seen that the continuity of the linea dura has become broken, indicating that infection is spreading to the cancellous tissue of the bone, where absorption of toxin will be more rapid and the destruction of the cancellous bone goes on more quickly. As the cancellous bone is affected by the action of the toxins and of the osteoclasts it loses its lime salts and then the collagenous basis substance becomes peptonised. This is shown in the skiagram by the disappearance of the sharply mottled appearance of the cancellous bone and its replacement by an area which in the negative is uniformly dark. At the same time the root of the tooth becomes shortened by absorption; if calculus is present in the pyorrhœa pocket around the gum margin this will show in the X-ray. The roots of teeth may also show the appearances of other pathological conditions. They may be greatly thickened or they may be absorbed. A thickening or exostosis of the roots of many teeth may be an evidence of a general disturbance of calcium metabolism and be an indication for an examination of the ionic calcium of the blood. There is another appearance which may also give an indication of disturbed calcium metabolism and that is the presence of pulp stones. These are small calcified nodules seen in the dental pulp in some skiagrams. If one tooth only is affected it is, of course, likely to be due to a local cause, but where two or more teeth show the presence of these calcified bodies and especially when they are in different parts of the mouth it is a probable indication of a general disturbance of the *p*H of the body fluids. When a patient is suffering from chronic intestinal stasis this thickening of the roots of teeth is seen, as also is another appearance. In some skiagrams the surface of the alveolar margin has undergone uniform absorption, as though it had been cut with a knife, the remaining alveolar bone does not appear to have been decalcified it retains the mottled appearance of cancellous bone. These skiagrams may be taken as indications of toxic absorption from some other part of the body. A localised absorption of the roots of a permanent tooth is generally the result of a traumatic injury to a tooth, such as a blow, which may have happened many years before. On the other hand, it may also be the evidence of a blood-borne infection from some other part of the body which is affecting a localised area which has received a previous injury; a similar state of affairs is sometimes seen in a knee or other joint. Lastly, may I remind you that skiagrams, like any other factor in diagnosis, must be read in relation to the patient's age.

Sector News

Guy's Letter

THE ravages caused by the staphylococcus and the common cold, or febris catarrhalis rheumatica as our forefathers rather aptly called it, have precipitated another round of the familiar game of Sector musical chairs. For Eric Davies has been stricken down with a carbuncle, and Glover has taken his place; while Rushforth, who has remained surprisingly free from vertigo in spite of the frequency with which he moves around, has taken the latter's chair. We really thought that our registrar was pursuing some mystic oriental rite when we saw a column of smoke arising from behind his head—but, no, it was merely the misbehaviour of a mundane heating pad.

The Royal College of Surgeons have justly recognised the ability of " Abe the Anæsthite," in granting him the Diploma of Anæsthetics. He invites any readers to a series of ether frolics and pentothal picnics in celebration. We also congratulate Glover on passing his Fellowship—a great relief after he had tried, with the modesty of a successful candidate, to convince us that he had " obviously come down." One H.S. was wise enough to take him on with a wager; and, as this consisted of no small quantity of the " hot and rebellious liquor," we excused a bout of hiccoughs that nearly spoilt a game of billiards.

The medical side is flourishing and have evacuated the Massage Hall for the luxuries of York Clinic, where the male patients occupy the first floor, with Sister Queen, who comes to us from Farnborough, as their hostess. No doubt the progress of medicine goes on in these wards, but we must apologise to one base hospital, as we sent down a diagnosis of " effective endocarditis." No new disease—just a slip of the pen!

A beam of light penetrated the darkness of our social life when a gramophone recital was held by Miss Wilkinson in the E.N.T. Department last Thursday. We are glad that she is continuing these evenings. The Residents now have a pleasant sitting-room in Nuffield House, and this received a noisy baptism when we held a final party for Raymond Hind, who has sailed for India.

We view the migration of the starlings with mixed feelings. This touch of Nature in the Borough was appreciated, though the safety and hygiene of the Park will be restored once more, We tolerated them without the use of fireworks, and were about to give them a course of kaolinised breadcrumbs, with, perhaps, a sedative, to quell their outbursts of hysterical chatter in the depths of the night. But now they have gone to Vichy.

C. F. H.

Orpington Letter

MELANCHOLY carefully blended with inebriation attended the departure of Hammond and Stead at the end of last month. We are sorry to lose them both, and welcome in their places Fowler and Hind, who have been engulfed by the ever-expanding maw of the Orthopædic Department.

After somewhat prolonged negotiations, the grass on the hockey field has been mown, and the season opened officially a few weeks ago. Dr. Campbell led a very determined team of House Officers against an equally determined team of Nurses. The latter were beaten 8–2, all our players returning safely to their base.

At a dance held in the Mess that evening, one of the Orthopædic House Surgeons gave an excellent, if rather voluptuous, demonstration of how to dance the tango. His sinuous technique suggests that he has undergone a series of manipulations to his lumbar region.

Following their recent offensive operations in South Kensington and elsewhere, the University of London examiners have issued an official communiqué before making a strategic withdrawal on all fronts. A local pincer movement in the Orpington area has resulted in some successes against the enemy, our losses being only slight. We offer our congratulations and sympathies impartially.

P. S. C.

Sherwood Park Letter

AS these letters are now a monthly " feature " the search for news should be a little easier. Dr. Spurrell maintains that it is of little account what is said, but we are glad that the same principle is not applied to his lectures or, for that matter, to the Home Guard. However, it is still a difficulty to conjure up something that appeals to one and all, as we seem to be so very cosmopolitan in our tastes.

Congratulations to those members of our clan who have been awarded " blues " and " half blues," and especially to " Bertie " Clarke—though at this late date it seems rather a doubtful compliment.

Unfortunately this is written before Mr. J. T. Murphy is to visit us, but it is certain that his visit will prove to be a popular event. No less so amongst the " intelligentia " as amongst the " left wing."

There is a new disease in Sherwood Park, and the symptoms are easy to recognise—people arrive *in the morning, if they arrive at all*, with a tired haggard appearance, usually wearing odd socks and a dirty look. On examination the cause is always found to be fire-watching or guard duty. How our children will laugh when we tell them about it—for it is a joke, a pathetic, aggravating and rather useless one, that only makes us all very tired, a condition that is now semi-permanent.

D. P. N.

Farnborough Letter

THE relegation of the Sector letters to the category of monthly rather than fortnightly features has, apart from providing space for discussing the architecture of Guy's, meant that there is more time for news to accumulate, but also more time for it to become stale before it appears in print. However, certain happenings during the past month do stand out.

The change over of Housemen on November 1st was largely a reshuffle of posts, the only newcomer being Mr. Craig, who came to fill the vacancy created by Mr. Fourman's departure for Dartford; Mr. Jackson has returned after a sojourn at the Wildernesse, but he can hardly be described as a newcomer. Various people have earned congratulations. Messrs. Rowlett, Craig and Fourman were successful in the recent London M.B. Examination, the last-named gaining distinction; Mr. McLaren qualified at the Conjoint and has gone straight on from Student House Offices to H.P. Rather different grounds for congratulation have been supplied by Mr. Rawlins, who has got married.

Sister Queen has returned to Guy's and her disappearance has left some of us feeling more like exiles than ever.

True to the principle that every action produces a reaction, the return of the dark evenings has evoked efforts to brighten them. Chief among these was a very successful dance held last week at the Crofton Hall. Waters was the M.C.; the music was provided by a Guy's " Swingtette " under the direction of Ronchetti; and Sister Marson acted as a sort of fairy godmother and conferred the benediction of the " Matron's Office " upon the proceedings. The hall was comfortably full of happy-looking people and we are credibly informed from a high quarter that the standard of behaviour was exceptionally good.

Our contemporary at Pembury recently referred to the contretemps which occurred there when a child consumed a cough-plate of chocolate agar. It seems that the children at Farnborough are either kept further from the starvation-line or else are more fastidious, for a similar plate was recently returned to the lab. here accompanied by a note stating that the "patient refused to take it."

V. C.

The Shape of Things to Come

By "Stanley"

THE Front Quadrangle enclosed on three sides by over-mellowed red brick and on the fourth by iron railings. The statue of our Founder, which at least once in each generation of Guy's men has been revealed, when "comes the dawn," to have been armed *cap-à-pie* (as Sir Samuel Wilks once described it) after the hilarity of the night-before. The Front Lodge, Colonnade, the Park with its perennial starlings—these pictures are surely graven on the hearts and occipital lobes of all Guy's men, wherever they may be.

Yet they must pass, and that eftsoones; for Guy's *must be rebuilt*.

The mere brick-and-mortar shell, shrine though it be, hallowed by Astley Cooper, Bright, Addison, Wilks, Pavy, Durham, Jacobson and how many others (including me, of course, as well as you) must in the natural course of things pass. In truth its passing is long overdue, but the associations inseparable from the name of Guy's will remain. It is for us to see that on the old foundations shall be builded a structure fit to give expression to the spirit of Guy's and its incomparable record, not only as a memorial to mark the achievements of our Alma Mater and her sons, but also to provide adequately for the future requirements of research, of medical practice, and of the needs of those to whom we minister.

This oration having been delivered, as J. Cæsar would say, the writer would fain remark that he has had something to do with building hospitals, two of which he has designed with his own fair hand. One of these has since become famous, but not necessarily on that account. It is fascinating work but, like matrimony, not to be undertaken lightly or inadvisedly. Hovering in the background is the continual bogey of Finance. Happy is the man who can give rein to his imagination undeterred by considerations of pounds, shillings and pence.

Take the question of site, for example. Ought Guy's to be rebuilt on its present site, or should this be sold and the Hospital moved to the outer suburbs, where land is cheaper and more plentiful? And, if so, where?

I cannot help asking myself what our patient-community of South-East London would do if the Hospital were moved to Blackheath, say, or Penge. The Borough, Bermondsey, Walworth, Rotherhithe—can we bring ourselves to desert them after more than two centuries, during which they have always looked to us for help with confidence and, I think, affection?

I should hate to answer "Yes."

Then, again, what form should the new hospital take? Should it be spread out on the pavilion system over a big area like St. Thomas's or should it follow the American lead and go skywards with a relatively restricted ground plan? Which is best calculated to withstand air bombardment?

Florence Nightingale's pavilion design was evolved in the light of her Crimean experience. At the time surgical wards were by no means free from sepsis and medical wards not infrequently housed the odd infectious case. This design was well calculated to offer obstacles to the spread of sepsis or infection through the hospital. Some of the disadvantages of the pavilion layout are—(1) it requires a considerable area of land and therefore (2) long water, electric, sewage and inter-communication telephone systems; (3) reduplication of the blocks increases the cost of heating, cooking and cleaning; (4) long corridors have to be traversed for conveyance of patients, distribution of medicines, dressings and other stores and the collection and issue of linen and bedding; (5) the gardens which separate the blocks are doubtless pleasant, but their maintenance is costly; they are not used a great deal by patients and they can be efficiently replaced by properly designed sun-verandahs on each floor. (6) The pavilion design may be extravagant as regards the number of personnel it requires to work it.

Because of its wider distribution the pavilion design is less likely to suffer extensive destruction if bombed.

To give an idea of the amount of detail which has to be considered when planning a hospital, here is the story of a personal experience of the writer's. Some years ago a certain hospital completed a new surgical block which was believed to be the very last word in design. The writer was invited by the chairman of the House Committee to go over it before it was taken into use and criticise it. On every hand there was evidence of careful and thoughtful planning and attention to detail. The wards had panel-heating and each had an annexe in which were kept the patients' personal belongings. There were cupboards divided into pigeon-holes, each pigeon-hole bearing numbers corresponding to the beds in the wards, for medicines, etc. All corners were rounded, of course, in accordance with the usual practice, but in the wards, in front of the rounded corner where the walls joined the floor, the designer had provided a right-angled step about three inches deep to prevent the beds being pushed hard against the walls, which entirely defeated the object of the most important rounded corner of all!

The theatres were air-conditioned—that is to say, all air was washed, filtered and heated and conducted into the theatre through brick conduits closed with iron gratings. The air outlet was by way of a visitors' or students' gallery, in front of which were two big sheets of plate glass, one overlapping the other louvre fashion, with a space between. I opened one of the iron gratings and inspected the air-conduit. It was round, not ovoid in section and was constructed of rough bricks, the joints between the courses being very roughly finished. Glazed bricks had not been used. Inside were a number of cigarette ends, many spent matches and a lot of fluff such as is picked up by a vacuum cleaner. The carefully washed and filtered air was blown into the theatre over this collection of rubbish! The sheets of plate-glass in front of the gallery were louvred in the wrong direction, so that instead of the lower one being outside the upper to allow a smooth outlet for air convected from the ceiling, the upper was outside the lower. This would create an undesirable turbulence at the point of exit. Anæsthetics were supplied from the basement on the beer-engine principle.

I sent my opinion in writing in a facetious vein and was amused to hear that it precipitated a meeting of the house committee at which the designer was invited to attend, but I never heard the result.

Preparation of draft plans takes a very long time. They are subjected to criticism, discussion and amendment over and over again before the finished drawings are approved and ready for the contractor. It would not be surprising to learn that work is already in progress on plans for the new Guy's, but that need not prevent readers from airing their own ideas.

* * * *

The above was written months ago—before the last atrocity—and the manuscript has been returned to me by the Editor, who asks whether I would like to revise it in view of correspondence on the subject in the *Gazette*.

I would like to say that since it was written I have seen Guy's, including the latest damage. No old Guy's man can contemplate the disappearance of the original Guy's House and the front quadrangle—so well-beloved and so intimately interwoven with some of the happiest years of his life—without the deepest emotion.

As I stood and looked upon the ruins I realised that the House That Guy Built, a mere thing of bricks and mortar, has become hallowed by time and association until it has grown to be not a mere building, but a thing of The Spirit. Whatever our mere personal feelings may be, those on whom the responsibility for reconstruction rests must be guided by many considerations of policy and finance when planning a new Shrine worthy of the Spirit of Guy's.

They may rebuild on the old site, where the Medical School and Raphael Nurses' Home and so many of the ancillary departments of our Hospital are. They may decide to maintain the Outpatient Department on the old site with enough beds to serve as a clearing hospital, while the majority of the beds for treatment will be housed at a suitable place in the country.

But however sentimental we may feel about the old place we must remember the hard facts which face those who have the matter in hand. Only they have a full knowledge of the circumstances and we must trust them to do the best thing. They are old Guy's men like ourselves. They love the place like we do, but they must not allow their heads to be dominated by their hearts. Think of the future.

We old fogeys feel very much like relatives after the death of a dear one. Those of us who live to see the new Guy's may even feel like strangers when we enter its portals. But it will still be Guy's; and we look to those future generations of Guy's men who will carry on the torch to add even greater lustre to its name, as they certainly will.

The Editor will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.

Correspondence

Rebuilding of Guy's

To the Editor of the GAZETTE.

SIR,—While Mr. Brock's grief over the destruction of the East wing of the Front Quadrangle is shared to the full by every Guy's man and woman, one cannot allow one's natural sympathy with his feeling to excuse the entirely unwarranted implication in his letter that " proper and careful consideration " was not given to the question before the demolition was carried out. This implication, based admittedly on hearsay evidence, is one of several indications in his letter that Mr. Brock has allowed his feelings to influence unduly his sense of fairness and his judgment. Briefly stated the facts are these.

Following the destructive fire on the night of April 16–17 the District Surveyor, after examining the gutted building, immediately informed the Hospital Architect, Mr. W. J. Walford, that he intended at once to commence the removal of those parts of the remaining structure that he considered to be dangerous to the public. On the urgent representations of Mr. Walford, he agreed to delay action in order to permit the matter to be brought before the Court of Governors. In the meantime, at the request of the Governors, a complete survey was undertaken by four experts (two Government Architects, Mr. Walford, and the District Surveyor himself) in order to ascertain whether it might be possible to save the structure remaining with a view to the subsequent reinstatement of the building or, failing that, to retain the whole or part of the Quadrangle frontage for incorporation later in a new building on the same site.

Careful examination showed that the main walls, despite their thickness, were fractured by great cracks and fissures, due to the intense heat, and that such of the internal walls as remained were in a useless and dangerous condition. The east, west and north walls were overhanging outwards and later a considerable part of the north wall collapsed, blocking St. Thomas's Street for the time being. The experts were agreed that it was not feasible to save the whole structure, and that, although it might prove possible to retain a part of the Quadrangle front, strong wood or steel shoring and strutting—material for which was not available—would be required. The District Surveyor made it clear that he would in any event schedule the wall for demolition should it exhibit any further movement or should further damage accrue from exposure, a contretemps which the experts regarded as highly probable, especially in view of the fact that some ten years previously examination of the foundations had shown that the short timber piling, on which the walls had rested originally, was completely rotted and decayed.

A special meeting of the General Court was summoned. The Treasurer, the Acting Treasurer and an unusually large number of Governors attended. After hearing the report of the Hospital Architect on the results of the survey, and only after full and detailed discussion, the Court reluctantly, but unanimously, came to the conclusion that no other course was open to it but to accept the demolition of the whole of the remaining parts of the East Wing.

To this statement of the facts of the case, I need only add, for Mr. Brock's information, that, under his Emergency Powers, the District Surveyor is authorised to proceed to demolish such buildings or parts of buildings as he considers to be dangerous to the public. The method adopted for the actual demolition, viz., the use of ropes with a lorry providing the motive power, was selected not, as Mr. Brock appears to think, on account of the difficulties encountered, but to obviate the necessity of employing skilled—and therefore expensive—demolition workers.

With regard to the future I regret that Mr. Brock should have feared lest the future of Guy's House should be decided " lightly and without adequate representation," and I am quite unaware of any grounds which could justify that misgiving. The Governors are well aware of the numerous and complicated problems with which the Hospital will be faced in the post-war period, both immediate and more remote, and have already taken steps to ensure that they will be given very careful consideration by an appropriate body. At its last meeting, after receiving a memorandum on the subject from the Superintendent, the Court set up a special Committee with a very wide reference to the problems of the future and decided to invite the Joint Committee, recently appointed for a similar purpose by the Medical Committee and the School Council to nominate five members. This Committee is not intended to replace but rather to supplement the Joint Committee, and it will advise the Court on all matters concerning the future policy of the Hospital.

One welcomes the flood of correspondence which threatens to follow the publication of Mr. Brock's letter, and one hopes that many Guy's men and women will be encouraged to express their views with regard to future developments, especially if they are constructive in character. About a hundred years ago the Hospital site was substantially increased towards the south, and the clearance of the east side of Great Maze Pond at least invites consideration of the desirability of extending the site in that direction. Rebuilding there must be—it was already long overdue—and there are very great possibilities, for there exists now an opportunity such as may not recur for generations. It should not be beyond the powers of the present generation to bring into being a hospital which will satisfy Mr. Atkins's inspiring call for a new Guy's, one worthy of a " brave new world," and one whose form, line and setting will compensate, in some measure, for what has been lost. And if, above all, we cherish and strengthen that tradition of service which is our finest heritage —as Mr. Slesinger has reminded us—we need have no undue anxiety for the future of Guy's.

Yours, etc.,

T. B. JOHNSTON,

Guy's Hospital, S.E.1. Superintendent.

To the Editor of the GAZETTE.

SIR,—At the conclusion of Mr. Brock's admirable letter in the *Gazette* on the rebuilding of Guy's he appeals to Guy's men and women who feel deeply on this subject to voice their opinions. I support Mr. Brock whole-heartedly in his desire that all that is beautiful that is left of Guy's should be preserved, and that the new Guy's House should be modelled on the old with, of course, modern improvements. I would like to point out some of the advantages of the surgical wards from the nursing point of view. The old surgical wards had character. This was not only because they were old, but because they were different from other wards, old or new. They were vividly described to me in America in terms of appreciation and envy. The wards were well ventilated and lighted and the bed space was adequate. There was space between the beds for dressing trolleys and other necessary tables. This left the centre of the wards clear for the passage of trolleys, wheel-chairs and other traffic. How often in modern hospital wards is the centre cluttered up with furniture which has to be moved for trolleys to pass.

The advantages of a " back " ward were many; treatments could be done, teas served whilst a round was in progress in the front ward. It provided a quiet corner for patients particularly in need of quiet. There was always a large table at the angle between the front and back wards where a good deal of work of one kind or another was done, so that even at night the nurses had both parts under observation. Sinks and wash-basins were in handy parts of the wards and radiators were plentiful. We were never short of hot blankets or hot-water bottles. Has any other hospital ever thought of hot-water bottle tanks? Very few modern wards can give the individual privacy to the patients that our bed-curtains can. Some have curtains surrounding three or four beds, but this still means moving large screens in order to give one patient privacy. I would also include a plea for open fires. All sick people appreciate a fire, particularly when convalescent, yet fireplaces are rarely built in modern hospitals. Cupboard space, both inside the ward and on the landings, was good and every ward had a balcony. Of course, many improvements were needed, notably in kitchens, bathrooms, etc., but from the nursing point of view I consider that the plan of the building was satisfactory. The wards were easily run and delightful to work in.

Yours, etc.,

FLORENCE TAYLOR.

To the Editor of the GAZETTE.

SIR,—In reply to Mr. Brock's invitation for opinions on post-war reconstruction, an interesting selection of letters has already been published. In the first letter, a Senior Surgeon would do away with all sentiment and his views may be summed up in three words, " Efficiency is beauty "; in the second, another surgeon comes to the same conclusion by a rather more devious route. Of the letters that follow four entirely endorse Mr. Brock's opposing view, some on behalf of their authors, and one claiming to represent the opinions of " the majority of old and new Guy's men and nurses "; one asks for a compromise embracing the best in the old and the new; while one would apparently go back to the eighteenth century and stay there, only taking with him some of the advances of the twentieth.

Here, then, we have a preliminary cross-section of the views of Guy's men past and present, and the authorities are faced with devising a scheme to satisfy the majority. I am in agreement with most of what has been written, and, leaving aside financial considerations, partly because I do not understand them, and partly because they will almost certainly be changed before the time for reconstruction arrives, I would like to suggest a compromise which might be worthy of practical consideration.

We need a new Surgical Block, and we want to retain parts of the original Guy's House. It is surely not necessary to build the new Surgical Block on the present site; and could we not achieve both our aims by building it on the other side of Maze Pond on land which is already Guy's property. It would then be possible to convert such parts of Guy's House as are retained into a larger Administration Block, which is probably already needed, and to include Superintendent's House, Counting House, Records Office, Chapel and the other offices, possibly with a suite of Consulting Rooms.

There arises the question of the fate of the block at the south end of Guy's House; this is no architectural masterpiece and its passing would be no great loss. As it will probably be necessary to rebuild the College on account of damage already sustained, this could be done at the south end of the Colonnade with the many advantages attendant on having the Residential Quarters in close proximity to the Administration Block. The outlook on the Park would make the site particularly suitable.

Whether the East wing of the Front Quadrangle be rebuilt to tone with the West, or the West wing be demolished and two symmetrical blocks erected is really a matter of secondary importance.

May I end with a plea that, before any course, be it destructive or constructive, is adopted, the plans be published so that the general approval or constructive criticism of all Guy's men past and present may be recorded before it is too late.

Yours, etc.,

J. M. MUNDEN.

Guy's Hospital, S.E.1.

Owing to the lack of editorial space due to paper rationing, it has been found impossible to publish the large number of letters that have been received in response to Mr. Brock's original letter. As many as possible will appear in the next issue of the *Gazette*, when acknowledgement will be made to all who have written. For the same reason, both Hospital Information and Sport have to be held over.—*Ed.*

Reviews

A Memorandum on the Nation's Dental Services. Issued by the Joint Planning Committee of Dental Students. *Price* 1s.

THIS excellent booklet would be commendable at any time, but its production under war-time conditions reflects great credit on the members of the Committee. In it are analysed the scope of the Dental Services and the facilities for training.

The incidence and consequences of dental disease on a lamentably ignorant public are set forth, with a hint that the medical profession is not exempt from censure, and notably in relation to the education and care of the individual, stress is laid on the hiatus in dental treatment between leaving the supervision of the School Dental Services and becoming eligible for dental benefit.

In the chapter on Dentistry as a Career is to be found much comprehensive information on tuition fees, scholarships and qualifications, and under the heading of Dental Education there are detailed and intriguing comparisons of the requirements and standards of schools in England and abroad. War-time dentistry is reviewed in so far as it concerns conditions in the Services and arising out of the transfer of the civilian population.

The final chapter consists of well-merited considered criticism of the present and pre-war states of the profession. There is in the Memorandum food for thought and discussion. As a product of a student body it is remarkably conservative, written rather in sorrow than in anger when retailing inadequacies of the system now in operation, and the promised section on post-war planning will be awaited with keen interest by readers of this present publication.

T. A. M.

Medical and Nursing Dictionary. By EVELYN PEARCE, Senior Sister-Tutor, The Middlesex Hospital, London.

THIS is the new title of the fourth edition of "A Short Encyclopædia for Nurses" which first appeared in 1933, and has proved of great value to many nurses, trained and in training. This edition is even more comprehensive than its predecessors, and contains a greater wealth of detail. From this point of view the new title is perhaps a little misleading. In her preface Miss Pearce expresses the desire that the book will meet the demand for a handy book of reference on medicine and nursing and prove helpful to nurses in hospital and private practice and to the men and women taking part in the emergency services of our country. To the completely uninitiated it is perhaps a little too advanced, but it cannot fail to meet the needs of the vast majority for whom it was written.

E. A. O.

EDS. {N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV 13*th December* 1941 *Number* 1393

PASSIM

IN his letter in this issue of the *Gazette*, Mr. Brock lays stress upon what is probably the only tangible feature that can arise from the present correspondence. This feature resides in the fact that although, as Professor Johnston ably describes, the decision to demolish the East Wing of the Front Quadrangle was only taken after thorough investigation and upon independent expert advice, the full story of the events leading up to this decision was not made available to many of those who have the welfare of the Hospital deeply in their hearts. As a result, various stories from ill-informed sources gained credence in a way that should not have occurred. The present correspondence has, however, fully ventilated the true facts of the case and should have helped to dispel many of the doubts that have been raised. The numerous letters that have been received upon this subject, but which it has been impossible to publish, are evidence of the widespread feeling amongst all old Guy's men upon the future of the Hospital. Above all, they are evidence of the desire that, although final decisions must be left to those to whom the responsibility is given and who alone have a full knowledge of the facts and expert advice behind them, some opportunity for public discussion should be given before irrevocable decisions for the future are made. Whilst expressing a variety of points of interest, these letters show an almost exactly arithmetical division into those who support Mr. Brock's original letter whole-heartedly and into those who, on different grounds, oppose his views. There can be no doubt as to the value of this correspondence, but it still remains true that the conditions prevailing at the end of the War will probably influence the correct policy to be adopted much more than the present discussion.

▭

THE Hospital was privileged last week-end to entertain a number of R.A.M.C. officers to a clinical meeting. This consisted of a series of lectures and demonstrations by members of the Staff upon various features of traumatic surgery and pre- and post-operative treatment. A very full programme was provided on Friday, Saturday and Sunday, under the general direction of Mr. Atkins. This was the first meeting of its kind to be provided by a voluntary hospital in London during this War, and it was highly successful in every way. It is to be hoped that this innovation may be repeated and, perhaps, extended in its scope.

▭

THE first reports upon the fighting in the new areas of axis aggression in the East contain not unexpected references to the use of poison gas. Although these reports are entirely unconfirmed and may well be later disproved, they serve to call attention to the ever-present need for such simple precautions as the carrying of gas-masks, especially in view of the repeated warnings concerning the possibility of invasion in the Spring. At this Hospital the thorough and detailed practices during the summer have left a state of preparedness which is not reflected by the low proportion of civilian population who bother to carry their masks in the streets to-day.

▭

THE Acting Superintendent has recently received a cable from the Guy's men in South Africa, sent on the occasion of a visit from Colonel W. H. Ogilvie. It may not be presumptuous to hope that on some future happier day an account of some "Ethiopian Experiences" may prove a worthy successor to the "American Diary."

▭

BY the death in August of this year of Anna M. Barham (née Schaufelberger), the Nursing School of Guy's Hospital has lost a very real friend. She trained here from 1919 to 1922, and was lately working on the staff of a Nursing Home at Southborough, near Tunbridge Wells. She remained affectionately attached to the Nurses' League, her old training school, to which she has left some of her belongings, with the object of benefiting, not only Nurses in training, but also the Past Guy's Nurses.

Obituary

ISIDORE SAMUELS, L.D.S. Eng.

By the tragic death of Mr. Isidore Samuels the profession in the West of England has been deprived of one of its most outstanding members. Zealous and keen to a most unusual degree he has used his great abilities with the single purpose of the betterment of mankind in general and his profession in particular.

Isidore—or as he was affectionately known by all as " Sammy "—was born at Exeter on September 11th, 1890. He commenced his professional education in 1907 with the late Mr. T. A. Goard and proceeded to Guy's Hospital in 1909, where he had a very successful student's career, being bracketed as Prizeman in Operative Dental Surgery. He also held the appointment of Assistant Dental House Surgeon and qualified as L.D.S. Eng. in 1911.

After an assistantship in Ipswich and with the late Mr. T. A. Goard he commenced his own practice at Exeter in January, 1914, and left this to join the French Red Cross in the Great War, being in charge of a dental ambulance unit. His services were recognised by the French Government in the award of a decoration.

Returning to Exeter in 1919 he soon became established in a very successful practice and received many public appointments. He was Hon. Dental Surgeon at the Devon and Exeter Dental Hospital, which was later incorporated in the Royal Devon and Exeter Hospital and was also appointed to the staff of the Royal West of England Residential School for the Deaf, the West of England Institution for the Blind, and the Church Stile School at Exminster. He was later appointed Hon. Dental Surgeon to the Royal Devon and Exeter Hospital and helped by his valued advice in the creation of its new dental department.

The Association will miss an exceptionally active member and his enthusiasm for Association affairs was intense. Keen and outspoken he strove to attain his ideal and the dental profession as a whole owes him much.

He was Hon. Treasurer and later Hon. Secretary of the Exeter and District Section, being one of the original members. He occupied the Chair in 1933 and became President of the Western Counties Branch in 1935. For many years on the Western Branch Council, where he will be remembered for his constructive activity, he was elected to the Representative Board in 1934.

In the present War he was a member of the Devon War Committee and Captain of a First Aid Point for Civil Defence in Exeter, which latter post he relinquished to undertake special war work at the Royal Devon and Exeter Hospital.

These many activities represent the success of his career. One was always impressed by his happy home life and full measure of sympathy is extended to his devoted wife and family in their great sorrow. " Sammy " liked his game of golf; was a keen conversationalist and well read in many subjects. Many knew of his acts of generosity done in an unostentatious way.

Here was, indeed, a happy fruitful life closed at its prime, but the memory of " Sammy " will remain sweet to a host of friends.

Chemotherapy in Gonorrhœa

By V. E. Lloyd, M.C., M.B., B.S.

CHEMOTHERAPY with sulphonamide compounds has now become accepted as the main treatment of gonococcal infections in men, women and children. Commencing a few years ago with the use of sulphanilamide it soon became evident that the infection was rapidly controlled in a large number of cases. Later the results of the widespread use of sulphapyridine clearly established this drug as an even more effective antigonococcal agent. Many reports now indicate that with sulphapyridine a rapid cure is effected in a high proportion of cases. More recently there are indications that sulphathiazole is equally effective but more free from undesirable toxic effects.

The many reports of the favourable results of sulphonamide therapy in gonorrhœa have led to a widespread impression that such treatment is simple and the results certain in all cases, but such a view is erroneous and dangerous.

Although an immense amount of clinical and laboratory work has been carried out with sulphonamide compounds in gonococcal and other infections, there is as yet no final agreement as to the amount of the compound necessary or the duration of treatment advisable. Numerous studies published in the last two years indicate that chemotherapy has a high degree of efficiency in gonococcal infection, but it is also clear that some complete failures are encountered whatever sulphonamide compound or scheme of dosage is employed. Some infectious cases appear to be resistant from the commencement; others relapse soon after an initial response; late relapses a few months after apparent cure are rare. It is evident that the number of relapses will be considerably reduced if thorough clinical and bacteriological search for residuæ of infection is practised as a routine, for this may reveal quiescent foci of infection in such regions as the prostate gland, urethral glands, cervix, etc.

There is now ample evidence that the successful action of sulphonamides depends largely upon the speedy production and subsequent maintenance of a high level of these compounds in the blood. For this reason it is essential to commence treatment with adequate doses. The daily amount should be divided into three or four doses which should be taken at intervals of about six to eight hours, and the last dose should be taken late in the evening.

Variations in the blood level due to irregularity in dosage interfere with the success of treatment. The dosage must be maintained for the prescribed period, however brilliant the initial effect may be in order to produce the best final result.

Advice must be given to every patient which will help to avoid intolerance and the interruption of treatment. On account of the occurrence of cyanosis in some cases, particularly with sulphanilamide, it is advisable for the patient to omit saline cathartics and to avoid eating eggs, onions and cheese. Cyanosis is rare following sulphapyridine and sulphathiazole, and these restrictions are probably not necessary.

Sun bathing and any ultraviolet light treatment should be prohibited, for some cases of sulphonamide dermatitis exhibit undoubted evidence of light sensitisation. These drugs should not be prescribed for severely anæmic patients and their use should be restricted when hepatic or renal disease is present. Because of the occurrence in some few patients of granulocytopænia it is inadvisable to prescribe at the same time other remedies, *e.g.*, amidopyrin or barbiturates, which may increase the likelihood. Patients suffering from gonorrhœa not infrequently need treatment for syphilis at the same time, but arsphenamine compounds must not be given during the same week as sulphonamide preparations. Injections of a bismuth preparation are advised.

In many instances of acute gonorrhœa in the male the rapid disappearance of all signs and symptoms of the infection may lead both doctor and patient to believe that the infection has ended within the first few days of chemotherapy. The premature cessation of treatment at this stage will be followed by relapse in a large number of cases. It is now well known that a few gonococci may persist in the secretions for some days after the urethral discharge has disappeared. It is, therefore, of the greatest importance that there should be no diminution in the intensity of treatment during the first five days.

The failure of chemotherapy to control gonorrhœa may be manifested in various ways, some of which are not readily appreciated. The early relapse is usually obvious to both doctor and patient. Treatment can be resumed at once but, although the time lost is short and may appear of little importance, the resumption of sulphonamide therapy may prove ineffective; the second response to treatment may be slow or absent and ultimate cure grossly delayed. Even with heavy dosage relapse is not unknown, but with a low dosage or interrupted treatment relapse is frequent. I have seen numerous cases in which an initial low dosage has been followed by a relapse or failure with subsequent resistant infection.

Interruption of treatment on account of minor symptoms of intolerance to the sulphonamide compound is a common cause of delayed recovery or failure. Chemotherapy cannot be effectively controlled if the patient be sent away with a supply of tablets for a whole week. The inevitable result of symptoms of intolerance in some patients is that the treatment is reduced or completely interrupted almost always at a vital stage in the control of the disease. Interruptions of this nature are particularly common in apprehensive patients.

The rapid action of sulphonamides in many cases may create the impression that gonorrhœa is now a trivial disease and that subsequent tests of cure are no longer necessary. At no time in the history of gonorrhœa have such tests been of more importance than they are to-day. No apparently cured male patient should be dismissed without careful clinical examinations and bacteriological tests over a period of at least two months. For women an observation period of six months is necessary.

The final value of the sulphonamide treatment of gonococcal infection is still unsettled, but several features are strikingly evident. Firstly, many of the recent infections in men, women and children are cured within a week; the various complications following the local extension of the infection such as acute epididymitis, prostatitis, salpingitis, gonorrhœal arthritis and iritis are becoming rareties. Gonococcal ophthalmia of the new born or of adults, a most destructive condition which for many years has helped to fill our blind schools, now has an excellent prognosis. In chronic gonococcal infection and in its various complications the results of treatment are capricious : sometimes rapid and curative, sometimes apparently ineffective.

The compounds chiefly used in this country are sulphanilamide and sulphapyridine, of which some details of their use in gonorrhœa will now be mentioned.

Sulphanilamide.—This compound has been used extensively, but in this country has been superseded by sulphapyridine. Various methods of dosage have been employed. An average course of treatment comprises a daily dose of 4 grammes for fourteen days. The proportion of apparent cures reported has varied between 30-60 per cent. At this hospital good results with the abovementioned dosage were obtained in about 50 per cent. of the first hundred of cases of recent gonorrhœa in men.

The majority of venereologists advise the use of sulphanilamide as soon as possible. A few, however, follow the German practice and prefer to delay the use of sulphanilamide until the second or third week of the disease. Gonococcal vaccines and urethral irrigation are employed during the pre-chemotherapy period. This delayed method has not given good results in my hands and complications were more frequent. Additional treatment with sulphanilamide may be required if the first course is not effective, but should not be given until after an interval of two weeks.

Sulphapyridine.—The many reports published since the introduction in 1938 of this preparation in the treatment of gonorrhœa—it was first tested out at this hospital—have all demonstrated its rapid control of the signs and symptoms of gonorrhœa. Apparent cures are reported in 80-90 per cent. of cases of acute gonococcal infection in men. Complications indicating the spread of the infection have been neglible. There appears to be general agreement with the results obtained at this hospital that sulphapyridine possesses a very high degree of activity against the gonococcus and that it is a most effective antigonococcal sulphonamide agent.

The range of dosage and the duration of treatment as with other sulphonamides have differed in various hands, but it is generally agreed that therapy should be commenced with some intensity and that full dosage should be maintained for at least a week. The routine at this clinic is to give 3 grammes daily for a period of seven days ; if any signs of infection are present after this period the treatment may be continued for an additional three days, but it is not advisable to prolong chemotherapy for more than ten days. There is no benefit to be obtained and a greater risk of toxic effects is run from extending treatment into a third week even when a lower dosage is employed.

In the successful cases there are rarely any signs of the infection after two days. The persistence of discharge or urinary threads beyond three days indicates a slow response with delayed cure or a resistant infection. Local treatment to the urethra in the male is considered unnecessary by some authorities, but I still prefer to employ urethral irrigations with pot. permang. 1 in 8,000 for the first seven days. The final results are slightly better and control of the patient is more readily maintained.

Sulphapyridine exhibits its full effect in the earliest stage of gonorrhœa and should be used as soon as possible. There appears to be no advantage from a period of delay to await the development and accumulation of specific antibodies in the blood.

The advisability of avoiding delay in the institution of chemotherapy is rendered evident by the minute number of gonococcal complications, such as epididymitis, prostatitis, etc., which arise from the spread of infection in the genito-urinary tract.

Sulphathiazole.—More recent derivatives of sulphanilamide to be added to our armamentarium are the thiazole compounds, the best known of which, 2 p.amino-benzene-sulphonamido-thiazole, is usually known as sulphathiazole. This compound is available in this country under the name of thiazamide (*M. & B.* 760), also as ciba 3714. Some reports of the favourable action of sulphathiazole in staphylococcal infections have been published, but so far little work has been carried out in gonococcal infections. About a year ago a small series of twenty cases of gonococcal urethritis in men treated at this hospital yielded results rivalling those given by sulphapyridine. A similar series treated with another thiazole derivative, sulphamethylthiazole, gave less encouraging results.

Since sulphathiazole is absorbed more rapidly from the gastrointestinal tract and excreted more rapidly than sulphapyridine a slightly higher dosage was used. In the series of cases referred to above a daily dose of 4 grammes was continued for five days.

Symptoms of intolerance are definitely much less in frequency and severity following sulphathiazole than after sulphapyridine or other sulphonamides, possibly on account of the rapid excretion, possibly because the proportion of the compound undergoing acetylation is less than with sulphapyridine.

Sulphathiazole or its acetyl derivative may appear in the urine in crystalline form and instances of hæmaturia have been reported possibly due to the deposition of these substances in the renal tubules These observations, together with the reports of urolith formation in animals following heavy sulphathiazole therapy, suggest that it is wise to see that there is no restriction of fluids during treatment and that the fluid intake should be considerably augmented for several days after the end of treatment.

Resistant gonococcal infections.—Sulphonamide therapy for gonorrhæa is by no means a certain cure in all patients. In any group of cases under treatment a small and variable number of failures will be encountered whatever scheme of dosage or variety of sulphonamide compound is utilised.

The causes, known or suspected, of such failures are many and merit close consideration. They may be considered under the headings of :—

1. *Inadequate dosage.*—Although sulphonamide therapy is now used widely and generally it is somewhat surprising as well as disconcerting to deal with patients whose condition has failed to respond to treatment because of inadequate dosage. It is difficult to ascertain whether the prescribing of these inadequate amounts is due to lack of knowledge or to temerity.

However, I am still asked to deal with patients whose gonococcal infection has failed to improve in spite of several weeks' treatment with one or several of the sulphonamide compounds. The errors in management are almost always the same. Inadequate dosage—two to three tablets daily—is the most frequent, and when the disease appears unimproved after a week or so slightly larger amounts may have been given and found equally ineffective.

Coupled with errors of dosage there has often been a complete omission of the general advice as to the necessity for avoidance of alcoholic drinks, exercise and sex activities. Such advice is just as necessary during chemotherapy as it was during the older methods of treatment of gonorrhœa.

On questioning patients in whom chemotherapy has failed, it will often be elicited that no stress had been laid upon the great importance of regular intervals between the doses of the sulphonamide nor upon the fact that omission of even one dose from forgetfulness is liable to render the treatment ineffective. In fact, the patient has frequently been sent away with sufficient tablets for a week's treatment with very casual and incomplete instructions as to how and when they should be taken.

With all sulphonamides it is essential in order to maintain a steady effective blood concentration of the drug, to space out the various doses at regular eight hourly intervals.

2. *Intolerance affecting treatment.*—The minor and major toxic effects of chemotherapy with sulphonamide compounds must be clearly understood by all who prescribe these drugs, particularly in ambulant patients. Every ambulant patient must be warned of the nature of intolerant signs and symptoms and be requested to report at each visit any that may occur. I have seen many instances of minor intolerant symptoms leading to the unnecessary interruption of treatment during the first few days of chemotherapy, in which period the ground lost in the control of gonorrhœa may not be recovered for weeks or months.

Such interruptions are often avoidable when the patient is seen daily or on alternate days when untoward effects such as headache, nausea, anorexia, mental depression, etc., can be discovered, explained and sometimes relieved. There appears to be no evidence that intolerance *per se* reduces the anti-gonococcal effect of the sulphonamide compounds.

3. *Foci of infection.*—Sulphonamide compounds appear to act quickly and efficiently on infections limited to the urethral mucous membrane ; they are less efficient when there are present deeply seated foci such as in the deeper urethral glands or prostate glands. In many of the failures of chemotherapy in the male such isolated residual foci will be found on investigation. Similar foci are also responsible for relapse after apparent recovery.

The continuation of infection in these foci is dependent chiefly upon the inadequacy of drainage from the focus and partly upon a restricted blood supply. This is portrayed by the relatively slow and poor response to chemotherapy of such complications as peri-urethral abscess, sub-acute prostatitis and seminal vesiculitis. In most cases when treatment is instituted in the early days of the disease such complications as the above rarely occur. The focus of infection most frequently discovered in resistant male cases is in the urethral glands or prostatic ducts.

4. *Resistant strains of the Gonococcus.*—The occurrence of the cases in which the infection has proved resistant to chemotherapy from the outset has naturally raised the question of drug-resistance of the gonococcus. Do some strains of this organism possess an inherent resistance to sulphonamides ? Are sulphonamide resistant strains evolved by treatment with small and ineffective amounts of these compounds ?

Some support for the possibility of the production of drug-resistant strains *in vitro* is suggested by the work of Westphal, Charles and Carpênter, who have demonstrated that the gonococcus acquires tolerance for sulphanilamide and for sulphapyridine when progressively increasing amounts of these compounds are introduced into the culture medium.

That many of the failures of chemotherapy can be explained by the presence of a drug-resistant strain of the gonococcus is considered unlikely, for the development of such strains during the last few years should have produced an increase in the proportion of cases resistant to sulphonamide chemotherapy, but such failures appear to be no more frequent now than when chemotherapy first came into general use for gonorrhœa.

It is well known that a gonoccal infection which has proved resistant to one sulphonamide may also be resistant to other sulphonamides, but such reaction is capricious. Infections which have been found resistant to sulphanilamide may react favourably to sulphapyridine or *vice versa.*

Also, it is not unusual to find, when treating gonorrhœa in husband and wife or mother and child, that one patient may prove resistant whereas the other may be speedily cured by the same sulphonamide drug.

Variation in the rate of absorption and excretion of sulphonamides may also help to explain failure to control the disease. But, so far, the available biochemical data, although indicating that absorption, blood level and excretion may vary in different patients, has not demonstrated any close correlation between absorption, blood-level and excretory rate on the one hand and therapeutic effect on the other. A proportion of every sulphonamide drug is converted by the liver into an inert acetyl derivative. Although this acetyl compound, *e.g.*, acetylsulphanilamide, is found to be variable in amount in different individuals, nevertheless there is no clear indication that a high degree of acetylation is associated with poor therapeutic effect.

However, it is probable that failures of adequate chemotherapy are more likely to be due to biochemical factors than to the evolution of sulphonamide resistant strains of the gonococcus.

Sector News

Pembury Letter

THE last month has seen the departure of Hugh Harley, and his loss has been felt deeply by all sections of the community here, as, indeed, it must have been all over the Sector, where his surgical acumen and teaching ability is gratefully remembered. We believe that the Army is at the moment trying to trim him into a soldier, Indians for the use of. We wish them—and him—luck! We extend a warm welcome to Walter Gilford, who has come to take over his work.

The Army has also claimed Dr. Waterfield, whose weekly visits we shall miss. Dr. Bouveri has now taken his place. Another new weekly visitor is Dr. Nevasquez, who is filling a gap in the teaching of the junior students with a pathological round in the wards, which is being greatly appreciated.

After months of hopes and hitches (who would have thought that a gas-cooker needed gas?) the residents have at last moved into their new living quarters and, as far as the German incident permits, now live in a veritable lap of luxury. Their old sitting-room has been handed over to the senior staff, who now have somewhere to take their sandwiches and thermos flasks. We have been told that a dining-room may one day serve meals to these ill-considered gentlemen.

Once upon a time the ladies' doctors were about to perform an operation and, at a word from the anæsthetist, an attempt was made to place the patient in that rude position in which these people would have their victims. But the limbs resisted movement and, under the glares of the surgeons and with protestations that the top end at any rate was well away, a voice mumbled " Going down," and the ether began to bubble furiously. Presently, with the surgeons turning a dull red, the anæsthetist a sickly white, and the patient an ominous blue yet still resistant, it dawned on those assembled that the fault was orthopædic, not anæsthetic, and there was great discomfort.

G. L. L R.

The Wildernesse Letter

ALTHOUGH we are unable yet to announce to the world any marked decrease in our golf handicaps, our first forty days and forty nights in the Wildernesse have passed extremely happily.

It seems likely, however, that we shall be forced to spend more of our time in the bunkers and on the fairways in the future if the number of our patients does not cease to dwindle. We suppose the approach of Christmas is to blame for this relative slackness, but we shall continue to stand on the entrance-steps twice a week hoping to greet more fully-laden Green Line 'buses.

We must express our gratitude to everyone here and to all our visitors for helping to make the opening of our Social Season on December 4th such a brilliant success. In particular, we did appreciate all the help and encouragement we received from Sister Bell. We hope she enjoyed our dance as much as we enjoyed her Boomps-a-Daisy!

A steady stream of Yule logs has already started to flow in traditional style into the Wildernesse and committees are to be seen all over the place planning the Christmas programme. We hear already that a very warm welcome to 1942 is being prepared, so, gentle reader, please put December 31st in your diary as a night on which to join us in losing our cares and giving the welkin a resounding crash.

Correspondence

Rebuilding of Guy's

To the Editor of the GAZETTE.

SIR,—It would be neither practicable nor desirable for me to comment upon the many letters you have received as a result of my one, but I have some things to say arising out of Professor Johnston's reply. I am glad that he has now placed on open record the story of the events leading to the demolition of the East Wing, but it is difficult to see the reason for the long official reticence on these matters which were of such general importance and which were causing, legitimately and reasonably, concern to many. I wrote my letter in July last, and it then lay on my desk for more than three months; during and before this time I had discussed the matters raised in it with many people at Guy's and had asked some of my colleagues to read it over. In September you yourself in "Passim" raised the same question in almost identical terms. Never during this time was any authoritative statement issued to explain the actions that had been taken, nor did I ever hear from anyone at the Hospital more than a part of the facts now made known.

Although the Superintendent dwells at much length on this pulling down of the East Wing, it formed but a small part of my letter which was really concerned with the *future* of certain portions of the Hospital front. I am neither deterred nor dismayed by his stern ministerial rebuke that he is "quite unaware of any grounds which would justify" my misgivings lest the future of Guy's House be decided lightly. My words were ill chosen, I admit, but I was fully aware that committees have been set up to consider "the future policy of the Hospital in the numerous and complicated problems with which the Hospital will be faced." My concern was, however, not with these major issues, but simply and solely with the fate of three parts of the building which I described explicitly. The reason for my concern lay, not in ignorance of these committees, but in my fear that the issue in regard to the fate of the Georgian front had been largely prejudged. Moreover, I felt that this decision was not simply a parochial one. Nothing in Professor Johnston's latter has altered my fears since they are founded on impressions gained and statements heard over some two to three years and intensified during these last few months. Indeed, it was this very intensification of recent opinion that actually decided me to air the issue.

In common with Professor Johnston and many other of your correspondents I would eagerly support the building of a new Guy's worthy of our past and full of promise for a "brave new world." This I have stated quite clearly. All that I have urged is that in planning this new Guy's we should not deliberately destroy the one and only part of the Hospital that is worth preserving as an adornment and as an inspiration to this new Guy's. The fate of these buildings may, of course, depend on many collateral and difficult problems, many of which cannot be understood now and certainly not by most of us; it may be that the new surgical block will arise somewhere else, and in this connection the excellent suggestions made by Mr. Munden, and hinted at by the Superintendent in his reference to the Maze Pond site, should be borne in mind. What I wish to stress is simply and solely the feeling that if the new Guy's arises without any of the old Georgian portion remaining, then however fine and acceptable the new building may be we shall be so much the poorer by the loss of the old.

Although many feel as I do about this, it is becoming clearer that there is a large body holding an opposite opinion, and I think that those of us who wish for the survival of the best of the old are to be disappointed. I remain unrepentant, for I am sure that the cause is worthy of being brought forward.

Yours, etc.,

R. C. BROCK.

Guy's Hospital, S.E.1.

To the Editor of the GAZETTE.

SIR,—If Thomas Guy could again visit the Borough and hear the discussion that is going on about his famous Hospital I am sure that he would be more than pleased at the interest that is being taken concerning its fate. I am not quite so certain though, if he were asked for his opinion, what that opinion would be. Being a man of the world as he undoubtedly was, and a man, I imagine, given to expressing his views quite clearly, I shrewdly expect that he would say, "Scrap the lot; I never meant it to be beautiful but only useful, and, anyhow, if you considered it beautiful in any way you haven't added to that beauty by buildings you have erected since I died." We should probably answer: "Well, sir, the Charity Commissioners won't allow us to indulge in such things as Southsea Speculations, and so we have to do the best that we can on a limited sum of money." And after finally declaring that as far as he was concerned he did not care what we did as long as his patients were well looked after, Thomas Guy would once again vanish, more than satisfied at the way his trust was being carried out and astonished and pleased at the extent of its growth.

Is not the question of finance the chief problem that will sway the policy to be adopted by the Hospital regarding its buildings. Whatever reconstruction has to take place, money must govern the result from an architectural point of view. Mr. Brock writes in his letter, "If we could be sure or even hopeful that a modern building would be as beautiful or attractive as the old, even if in a totally different style, I would not protest, but of this I am far from certain." Why is Mr. Brock far from certain? Probably for the same reason that I am. That for many years so little in the way of beautiful architecture has been accomplished, that it would be optimistic to think that in this particular instance an exception would be made. Captain Baker is right when he says "Good architecture is surely a proper balance between the æsthetic and the practical," and the proper balance is, of course, the best and most of both these qualities. Beauty is, of course, as each man sees it, but to say that an ugly building acquires beauty because of its utility is, to my mind, unreasonable, e.g., Nuffield House is utilitarian to a degree, but externally it was ugly when completed, is ugly still and will remain so. In the same way, to say that "we can appreciate the loveliness of Canterbury and Winchester together with Liverpool cathedrals because old or new they subserve perfectly the functions for which they were built" seems to be equally unreasonable, for one of the chief functions of such buildings is to house a preacher and his congregation, and it is all important that the preacher should be distinctly heard. Of all buildings that fail in this respect I should imagine a cathedral probably takes first place. Canterbury and Winchester are beautiful to the eye for one reason only, and that is their external and internal appearance. That beauty will satisfy the mind, apart from the eye, by the fact that their other functions are well served by the buildings in question.

Now all this seems a partial condemnation of the modern architect. But should he not be pitied instead of condemned. Canterbury and Winchester—indeed, all our best specimens of old architecture—were erected in leisurely fashion (in some cases taking centuries to complete). Skilled craftsmen were in abundance (where can you find them now), the actual construction of a building was looked upon as a work of art (not as a job to finish quickly in order to proceed with the next) and, in the great majority of cases, money was not of such concern as it is now.

I was speaking on this subject to the head of a large School of Arts and Crafts—architecture being one of the subjects studied—and he very strongly upheld me in thinking that we should never have new buildings of beauty as long as architects were asked to design them solely with a view to utility and, as he expressed, "at so much a cubic foot." What can the poor architect do under such conditions but erect a box of bricks and, for his own dignity, call it "neo-Georgian architecture."

If post-war conditions permit of unlimited (within reason) expenditure there may be hope. If limited, little hope. If a lack, I am afraid a perpetuation of the present-day abominations.

It seems likely, therefore, that if another building takes the place of Guy's House, we shall have to tolerate something very much less pleasant to gaze on than the old building. As far as I am concerned, and I should think most others, whether the rest of the Hospital remains up or comes down matters but little except on the score of unnecessary expense.

I have been associated daily with Guy's now for nearer forty than thirty years, and this correspondence in the *Gazette* has made me analyse my thoughts and feelings on this subject and, as a result, I have come to the following conclusions :—

1. That the front part of Guy's Building has no particular architectural beauty, but is very pleasing to look upon.

2. That this may be due to a great extent to the plan as well as the elevation—the height of the buildings fitting in well with the size of the courtyard.

3. That the colonnade is of interesting design, original to an extent and makes with the quadrangles a pleasnt feature marred somewhat by the height of the surrounding buildings.

I should not call any of it really beautiful, but I certainly should not call it displeasing.

So much for that side of the question. What else is there to be considered ? Mr. Patrick Clarkson mentioned one point which certainly should not be ignored, viz., the part that the buildings play in the formation of a Guy's life. This is, of course, because of their age and would be entirely lost if the buildings were demolished. This seems a small point and may be scoffed at by many, but I am convinced that it is a point that could well be borne in mind.

For me and for many others the chief and most interesting part of the Hospital (apart from the chapel and crypt) have disappeared, and even the erection of an East wing similar in character to the old one cannot replace the interior as we knew it. The Court Room, Governor's Committee Room, Counting House, Renter's Office, Superintendent's House and, above all, the magnificent staircase—these as they were with the ghosts of their former occupants have gone for ever.

Although susceptible to environment and with a veneration for things ancient, if I could be convinced that in place of the present Guy's House something equally pleasing but more utilitarian could be erected, I should not shed any tears because I am sure it would be for the betterment of Thomas Guy's trust and, after all, that is really the main consideration, and although a little would be lost far more would be gained. But like Mr. Dick, in "David Copperfield," into whose conversation King Charles's head would keep intruding, so does that dreadful model of the suggested new Surgical Block that one saw before, not after, a dinner some few years ago in the Governors' Committee Room, keep on intruding itself into my head and, like Mr. Brock, I am more than fearful. Therefore, as a piece of constructive policy I am suggesting a rebuilding of the East Wing to the original design, thus leaving the front of the Hospital as it originally stood. I cannot agree with Mr. Munden's statement, "Whether the East Wing of the Front Quadrangle be rebuilt to tone with the West, or the West Wing be demolished . . . and two symmetrical blocks erected is really a matter of secondary importance." I should suggest that, instead of being of secondary importance, it is the gist of the situation. However, I am in entire agreement with him in suggesting that the Surgical Wards, Theatres, etc., as at present situated, should be transferred elsewhere and that these parts be used for administrative purposes, etc. As long as the colonnade and quadrangles remained necessary alterations could be made in the buildings themselves on the southern, western and eastern sides of the quadrangles to any degree that was deemed desirable to suit them for their new purpose.

As I have said before, that what happens to the rest of the Hospital buildings would not cause me much concern, but I would add that if a new Surgical Block arises elsewhere or any other buildings are put up although they may not be things of beauty let them not offend, and, to quote Mr. Still, "not forgetting that they probably will be out of date in twenty years."

Finally, let me say that I have written this letter—firstly, on the assumption that as far as air-raid damage is concerned little or nothing now happens to the Hospital ; and, secondly, on the assumption that the Hospital will remain on its present site.

With regard to the latter point, I would ask those who are thinking of any benefit to be obtained by moving the Hospital elsewhere to consider apart from everything I have already said that Guy's is a great teaching Hospital and it is of the utmost importance that its easy accessibility to students should be maintained, not only from the financial point of view, but from many other points of view as well. All roads, rail and others, lead to London, but they certainly don't to quite a number of places that the Hospital has lately been associated with. By the way, I wonder what Keats would have said on this subject! "A thing . . . ." No, no, I have quoted enough already.

Yours, etc.,

F. BOCQUET BULL.

Medical School,
Guy's Hospital, S.E.1.

The Editors have to thank the following correspondents for their contributions on this subject, and very sincerely regret that space does not permit publication :—

J. Bentley
P. N. Corden
D. M. Douglas
W. J. Gardner
R. Hale-White
S. C. H. Lane
A. Norman Leeming
M. Partridge
O. Plowright
P. R. Wheatley.

Paper Salvage Week

To the Editor of the GAZETTE.

SIR,—It may interest your readers to learn that as the result of a Paper Salvage Week recently held at Guy's, a total weight of 10 tons 19 cwt. 1 qr. 10 lb. was collected for which the Hospital was paid £55 0*s*. 5*d*.

Paper salvage has by no means ceased after the special drive was completed. Sacks are available to every department and ward in the Hospital on application to the Superintendent's Office, and all paper should be sent Martha Ward, whence it will be collected and sold. The prices vary according to the different grades of paper, and it is therefore important that during collection the paper should be sorted into the following types :—(*a*) Newspapers, (*b*) Ledgers, (*c*) Books and Office Records, (*d*) Mixed Brown Papers and Cardboard, (*e*) Mixed Papers.

We at Guy's are rather proud of the total collected during our Salvage Week. We believe it would be difficult for other hospitals in Sector 10 to beat us. Will anyone accept the challenge?

Yours, etc.,

P. M. F. BISHOP,
Deputy Superintendent.

Guy's Hospital, S.E.1.

Sport

Golf

A MOST enjoyable game was played between a Hospital team, composed of members of the Staff and Students, against Addington Golf Club, on Sunday, November 30th.

Arriving early on a raw morning to find their opponents receiving their last words of advice from Fred Robson on the first tee, the Hospital golfers were rather overpowered by the good form of the opposition, and lost the singles 4½–1½. The foursomes, however, were more evenly matched. Dr. Seward and Drury produced some excellent golf to beat Cook and Frisby on the last green, while Drs. Knott and Marsh put up a great fight against odds to halve. Mr. Eckhoff and Brown, unfortunately, found a lot of trouble and succumbed after some powerful recovery play from the gorse.

The results were as follows :—

Guy's Hospital Students and Staff.		*Addington Golf Club.*	
FOURSOMES.			
Dr. E. C. Seward and J.W.Drury (1 hole)	1	F. Cook and F. R. Frisby	0
Dr. F. A. Knott and S. A. Marsh	½	P. V. Hunter and S. R. Benson	½
Mr. N. L. Eckhoff and P. F. E. Brown	0	H. L. Rouse and L. W. Brown (5 & 4)	1
Totals	1½		1½
SINGLES.			
Dr. E. C. Seward	½	F. Cook	½
J. W. Drury (1 hole)	1	R. Russell	0
Dr. F. A. Knott	0	H. L. Rouse (1 hole)	1
S. A. Marsh	0	F. R. Frisby (7 & 6)	1
Mr. N. L. Eckhoff	0	W. A. Osborne (5&4)	1
P. F. E. Brown	0	S. R. Benson (1 hole)	1
Totals	1½		4½
Grand Aggregatess	3		6

Hospital Information, etc.

Pass List

UNIVERSITY OF LONDON.
THIRD (M.B., B.S.) EXAMINATION.
October, 1941.

Honours.

Revised regulations.

*L. P. R. Fourman.

* Distinguished in Obstetrics and Gynæcology.

Pass.

Old regulations.

P. H. Beales.

Revised regulations.

G. H. D. Channing
R. A. Craig, B.Sc.
B. J. Fowler
H. P. Guerrier
J. C. Holman
H. L. Joyce
L. Rendell-Baker
B. Rowlatt
R. M. Sharpe
St. J. M. A. Tolhurst
H. W. Wheate

SUPPLEMENTARY PASS LIST.

Part I.—Revised regulations.

A. Bloom
P. B. Counsell
W. G. Cross, B.D.S.
C. N. d'E. Eastes
R. A. Gill
A. W. Hind
D. H. King
N. P. W. Littler, B.Sc.
G. H. T. Lloyd
V. H. Martindale
P. B. Maxted
L. F. Miller
A. C. Parkinson
D. D. Rees
F. R. Russell
S. D. Stock
G. N. J. Thomas
W. R. Watson
J. Wilks
J. Williams

Part II.—Revised regulations.

G. J. Amiel
G. T. Hammond
M. P. Hutchinson
B. D. L. Johnson
J. S. Stead
A. B. Stratton
W. R. Watson

Part III.—Revised regulations.

C. L. F. Beaton
P. R. C. Evans
G. E. McFall
J. K. Martin
R. J. W. Rees, B.Sc.
P. A. J. Smith

SOCIETY OF APOTHECARIES OF LONDON. FINAL EXAMINATION.

October, 1941.

Surgery.

*G. M. Pearson
R. L. Skea

Midwifery.

W. J. Lewis
W. C. Salter

* Has completed the examination.

ROYAL COLLEGE OF SURGEONS.

L.D.S.

October, 1941.

Part I.—Surgery.

A. E. Cadman
G. S. Chase
R. F. Colmore
J. W. Drury
J. R. Fuller
W. J. M. Hale
E. Harvey
A. J. Hayward
J. E. Jones
P. Jones
J. O. Less
J. R. C. Matthews
W. L. Oakes
V. L. Simons
E. S. Jerichower
J. L. Watson

Part II.—Dental Surgery.

J. A. Boyd
A. E. Cadman
P. Cohen
R. F. Colmore
W. J. Ford
J. H. Forrester
R. M. Gillion
T. J. Hancock
E. Horne
A. V. Hurst
M. A. Kettle
D. A. T. Payne
W. L. Renouf
A. Ross
F. M. Wood

Papers by Guy's Men

Brooke, R. Treatment of Hallux Valgus deformity in soldiers. *Brit. Med. J.*, 1941, ii, 605.

Cameron, H. C. Fifty years' progress in Pædiatrics: Infantile scurvy. *Clin. J.*, 1941, **70**, 281.

Denny-Brown, D., and another. Experimental cerebral concussion. *Brain*, 1941, **64**, 93.

Handley, W. Sampson. Hemiprostatectomy for Unilateral Adenomatous enlargement. *Brit. Med. J.*, 1941, ii, 681.

Layton, T. B. Medicine and Duty. *Lancet*, 1941, ii, 587.

Parfitt, G. J., and Others. Arch-wires for the Immobilisation of fractures of the Mandible. *Brit. Dent. J.*, **71**, 295.

Payne, W. W., and Another. Black-currant Purée as a source of Vitamin C. *Lancet*, 1941, ii, 596.

Traill, R. R. The correlation of pathology, physical signs, and X-ray appearances in development of lung cavitation. *Brit. Med. J.*, 1941, ii, 601.

Guy's Men in the Forces

From now onward we shall publish Lists of Men serving with the Forces and shall be grateful for any information that will help us to keep this List up to date. We regret we are unable to publish their addresses :—

Barber, N., Captain, R.A.M.C.
Cox, A. G. C., Lieut., R.A.M.C.
Davis, H. C., Flt.-Lt., R.A.F.
Hammond, R. A. E., Major, R.A.M.C.
Holling, H. E., Surg. Lt.-Cmdr., R.N.V.R.
Hodgson-Todd, E. R., Flt-Lt., R.A.F.
Lees, J. M., Major, R.A.M.C.
Morris, I. B., Major, R.A.M.C.
Jones, T. R., Lieut., R.A.M.C.
McCall, A. M., Surg.-Lt., R.N.V.R.
Shire, T. H., Surg.-Lt., R.N.V.R.
Wheatley, P. R., Major, R.A.M.C.

Changes of Address

James A. S. Wright, L.D.S., R.C.S., 34, Devonshire Place, W.1 (Tel.: Welbeck 3256).

G. C. Millis, M.B., B.Ch., 55, St. John's Avenue, Putney, S.W.15 (Tel.: Putney 6313).

C. B. Stainer, L.D.S., R.C.S., 59, Evelegh Road, Farlington, nr. Portsmouth.

Appointment

Miss S. Smith-Bevan, A.R.R.C., Matron, Fulham L.C.C. Hospital.

Births

CLARKSON.—On November 11th, 1941, at Eynsham Hall, Witney, Oxfordshire, to Barbara, wife of Major Patrick Wensley Clarkson, R.A.M.C.—a son.

HOLLAND.—On November 19th, 1941, at the Avenue Nursing Home, Cheam, to Betty, née Lambert, wife of Surgeon-Lieutenant Roger Holland, R.N.V.R.,—a daughter, Susan Elizabeth.

SPENCER-WILSON.—On August 12th, 1941, at the Anglo-American Hospital, Cairo, to Isobel, wife of Captain Donald Spencer Wilson, A. D. Corps—a son.

WHITWORTH.—On December 2nd, 1941, at Four Winds, Kenilworth, to Margaret, wife of Kenneth W. Whitworth, L.D.S., R.C.S.—a son (John Hince).

Death

HINDE.—Reported missing in September, now known to have died at sea, August, 1941, as a result of enemy action, Captain E. J. F. Hinde, R.A.M.C., eldest son of Dr. and Mrs. E. B. Hinde, of Norwich.

EDS. { N.A.N.
B.S.L.

GUY'S HOSPITAL GAZETTE

A Journal of Medicine, Surgery, Dentistry and Hospital News.

PUBLISHED FORTNIGHTLY.

Volume LV *27th December* 1941 *Number* 1394

PASSIM

FEW people realise the scope and the extent of function of the Emergency Hospital Service; in fact, it is not uncommon to hear criticism of the vast expenditure, elaborate building programmes, and, what is most important at the present time, the large medical and nursing staffs which are associated with the civilian medical system. In addition, it is true to say that almost everyone serving in the E.M.S. profits personally both in experience and in prestige, and thus the importance of their work tends to be discounted whilst they are accused of avoiding military service for selfish reasons.

The majority of the Sector Hospitals have allocated a fair proportion of their beds for the treatment of the Service sick and have placed at their disposal all their medical, surgical and nursing personnel together with laboratory and X-ray facilities. Thus it is not surprising to find a large fraction of the civilian doctor's time occupied with the treatment of patients from the Army, Navy, Air Force and the Auxiliary Services. Some hospitals have gone so far as to provide out-patients and follow-up departments, and special wards for gastric, skin and orthopædic cases; even acute surgical emergencies and accident cases are being treated at the local civilian hospitals. All this work is being carried out owing to the close and friendly co-operation that exists between the uniformed and un-uniformed medical officers and, indeed, friction between the two is unheard of.

In addition to this valuable contribution to the Services, the civilian doctor has also to bear the increased load of civilian practice and, in time of air-raids, he is once again responsible for mastering the casualty problem; this latter task often demands as much courage and involves as much personal danger as that which his uniformed colleague meets with on active service.

Thus, while the staff of the E.M.S. have the privilege of being actively employed, no matter what rank one considers, there are undoubted sacrifices associated with each. For instance, starting with the most junior of all, namely the House Officer, we find that he is a man who works long hours each day, often seven days a week, and who carries important responsibilities on his shoulders; on work of equivalent importance in other spheres of activity, he would earn between three and seven times his present salary, and would receive more rapid promotion if he entered the Services soon after qualification. He receives no family allowances and, on the basis of his earned income, cannot consider even the prospect of marriage. In case of illness or injury he cannot expect a fraction of the financial assistance that his uniformed colleague would receive and, in the event of death, his dependants do not receive a pension. Probably most important of all is the fact that this man is unable to plan his future because on any day he may receive a registered letter informing him of his "calling-up" date. Similar incompatabilities could be described all the way up to include the senior officers of the E.M.S.

There is one apparent solution to all these difficulties, and that is the formation of a unified service involving the whole medical profession. Instead of having various authorities competing against each other with or without success, there would thus be a single command who could expediently utilise the country's medical resources, dividing up the work to be done more evenly and, at the same time, concentrating personnel where there was potential need of them. If every medically qualified person in Britain were allowed to do a full day's work, how real would this much-discussed shortage of doctors be?

◆

THE *Gazette* takes this opportunity of wishing its readers and friends a pleasant Christmas and the best of luck during the coming year. Now that the pendulum of war is swinging in a more favourable direction we can all share a more enthusiastic outlook for the future and hope for the early return of normal times.

The Sulphonamides in Dermatology

By David Erskine, M.D., D.P.H.

THE therapeutic value of the sulphonamide compounds for diseases of the skin has been extensively tested in recent years. Spectacular results were obtained in the treatment of certain general pyogenic infections and suggested the use of these new compounds experimentally in skin diseases, many of which are so refractory to the older methods of treatment. Thus the drugs have been widely used in conditions which ætiologically are frequently obscure and in which there was no direct indication on which to expect a satisfactory result. It would be unfortunate if the failures thus experienced resulted in the compounds being withheld from the treatment of certain skin conditions which have been shown to respond to this form of medication.

Many diseases of the skin are closely associated with errors of diet, deficiencies, and abnormal metabolism, while the beneficial results that are obtained in sulphonamide administration are probably due to the bacteriostatic action of the compounds on certain organisms; we are, therefore, only justified in expecting therapeutic value in those skin conditions which are associated with such pyogenic infections. Further, the sulphonamide compounds have proved to be of greatest value in the treatment of acute infections and they have been less successful in combating chronic conditions; many skin diseases, including those agreed to be of pyogenic origin, are of the latter order, while others are not infrequently associated with additional factors such as focal sepsis or dietary irregularities. Unless these associated factors are recognised and appropriately treated during chemotherapy, it is probable that the condition will rapidly relapse even after apparently successful treatment.

When employed in suitable cases, successful chemotherapy very largely depends on maintaining an optimum concentration of the drug in the circulation and the required concentration appears to vary with the different conditions under treatment. The so-called "drug resistance" can be induced by inadequate early dosage and, in my opinion, excessive dosage also gives less reliable results, possibly on account of the extension in some way of the inhibiting action of the drug to the defence processes of the patient. It must be recognised that it is only possible to maintain the required concentration in the blood by the regular spacing of the doses, and this cannot be obtained by vague instructions to the patient to take the sulphonamide three times a day; this will usually result in an excessive interval from tea-time to breakfast the next day, during which time, on account of the rapid excretion, the circulating concentration falls to an inadequate level which may adversely affect the further action of the drug.

As a general rule, then, only suitable cases should be selected for chemotherapy; the optimum dosage indicated for the particular condition must be given at regular intervals and any associated factors should be assessed and treated at the same time. Adjuvant treatment, internal or external, will frequently be indicated and it should not be withheld because a favourable result is expected from chemotherapy alone. In view of the unpleasant side effects often encountered during sulphonamide medication, it is undesirable to administer the drugs for minor lesions which are localised and can be expected to clear up on simple local treatment. If the sulphonamides are employed along these lines many encouraging results can be obtained in the treatment of diseases of the skin, but the haphazard use of the drugs in difficult and refractory cases is to be deprecated.

Treatment with sulphonamide compounds may be either internal, external or combined. Internal administration may be orally with tablets or solutions or by intramuscular injection of one of the suitable preparations. In external treatment it is usual to use either a paste, an ointment or sulphonamide powder. There are many proprietary brands of sulphonamide ointment, but a simple and inexpensive one may be made by adding 25 grains of powdered sulphonamide to an ounce of lanolin; this gives a 5 per cent. ointment which is adequate for all local treatment as stronger applications tend to be irritating. Sulphonamide powders are now in extensive use for the packing of wounds and for application to infected surfaces, but any real prophylactic value has yet to be assessed. Taken by mouth one must consider the question of absorption; further, sulphanilamide is considered to have a lower power of penetration in the tissues than sulphapyridine, and that is probably why the latter drug is more reliable when used for internal medication. The newer compound, sulphathiazole, appears to give a very low incidence of symptoms of intolerance while being as effective therapeutically as sulphapyridine, and it is reported to have an action on staphylococci which the earlier sulphonamides have not shown. Supplies of sulphathiazole have so far been restricted so that very little experimental work has yet been done, but it may well prove to have a considerable advantage over the other compounds in the treatment of skin diseases.

In the consideration of treatment, it will be an advantage to divide the skin diseases amenable to sulphonamides into two groups—the first group including those conditions which may be expected to react favourably; the second group will include conditions which have been shown to benefit partially or if the necessary adjuvant treatment is also given in addition to the chemotherapy.

From the point of view of expense sulphanilamide should be used whenever possible, reserving sulphapyridine for cases in which it is specially indicated or which have proved refractory to treatment with the former compound. When sulphanilamide is used, eggs, onions and saline aperients should be forbidden, but this is not necessary with M. & B. 693.

GROUP I.

Carbuncles.—There is no indication for sulphonamide in the treatment of a properly localised carbuncle which needs only drainage. Satisfactory results have been obtained in aborting a carbuncle under treatment with 1 gramme of sulphanilamide six hourly for four or five days together with short-wave diathermy. When there is cellulitis the drugs are beneficial in localising the infection if administered in adequate dosage; usually M. & B. 693, 1 gramme four-hourly for two or three days and then 1 gramme eight-hourly for a further few days is prescribed. There is no evidence that these drugs have any therapeutic value in the treatment of furunculosis.

Erysipelas. — This condition responds very favourably if large doses are used. A minimum of 1 gramme of sulphanilamide four-hourly for at least three days is recommended, and this should be followed up by a reduced dose for a further few days. It is important not to decrease the dose on early signs of response, as cases treated in this way would frequently relapse.

Impetigo.—Mild cases do not require to be submitted to the discomfort associated with sulphonamide administration, but the majority of cases of impetigo contagiosa will improve very rapidly with chemotherapy. Uncomplicated streptococcal impetigo, in which vesicles and ulcers occur on an erythematous base, do respond more consistently than those lesions arising on normal skin which are now considered to be of staphylococcal origin, but the drug usually proves of benefit in both types. The crusts are removed with eau d'alibour and calamine lotion with ichthyol (2 per cent.), or 5 per cent. sulphonamide ointment, is then applied; this should be done at least twice a day. Two half-gramme tablets of sulphanilamide are prescribed every eight hours for seven days. (For a child under ten years of age half this dose is adequate and is well tolerated.) In a few resistant cases I have found M. & B. 693 to be effective when sulphanilamide has failed. In view of the recent popularity of ultra violet light as an adjuvant in the treatment of impetigo, it must be realised that here, as in any other condition under treatment with sulphonamides, exposure to artificial sunlight is absolutely contra-indicated on account of the risk of inducing a dermatitis of the photosensitisation type.

Streptococcal intertrigo responds rapidly to local treatment with a calamine and ichthyol lotion, but M. & B. 693, two tablets eight-hourly is of value in difficult cases. Additional factors such as anæmia or a pityrosporon infection also require attention.

Several cases of ecthyma have made rapid progress when treated with sulphapyridine 1 gramme eight-hourly.

The value of a suspension of 5 per cent. sulphapyridine in glycerine was reported to me by Dr. P. S. Silver, and I have recently used it extensively for *otitis externa* with considerable success.

Dermatitis herpetiformis.—M. & B. 693 is regarded by some authorities as being almost a specific remedy in the treatment of this condition. 1 gramme is given eight-hourly for fourteen days together with local application of calamine lotion or, later, pasta picis et hydrarygri ammoniati.

Pemphigus vulgaris.—This condition would properly be included in our second group but, in view of the close association with the previous condition, it can conveniently be considered here. The chronicity of the disease is well recognised; cases have been benefited by M. & B.693 given either by injection of the soluble salt (2 c.c. 33 per cent. solution) intramuscularly twice daily or, in suitable cases, in a dose of two half-gramme tablets by mouth eight-hourly. Often the improvement is only temporary and one is to some extent limited by the safety limit of administration; relapses are frequent, but the temporary relief which is sometimes obtained does justify a trial of the compound.

Acute Pemphigus.—The high mortality rate of acute pemphigus has been very favourably influenced since sulphonamides have been available for treatment. A careful supervision of the case is essential to abort any tendency to agranulocytosis, which, I believe, is specially liable to occur in this condition. I have reported such a case (Erskine & Royds, 1939) in which, on account of the low total dosage of M. & B. 693, it appeared that there may have been a combined toxic action on the bone marrow by the sulphonamide and "pemphigus" factor. Full doses are required for a few days if the infection is to be brought under control and further administration must depend on the general condition of the patient.

Streptococcal Dermatitis.—This condition will usually respond to appropriate treatment without the assistance of the sulphonamides, but in the more chronic cases sulphanilamide (1 gramme eight-hourly) may be tried and will often be more effective than the protein shock therapy which has been a popular method of treatment for refractory cases.

Lupus erythematosus.—There is at present some difference of opinion on the value of sulphonamide for the treatment of this condition. Barber (1941) has advanced an explanation of this in further describing two types of this disease: one type being a toxic manifestation (as opposed to lupus vulgaris) of a tuberculous focus and which is not amenable to chemotherapy; the other type being more diffuse and erythematous (with less induration and scarring) and is probably associated with toxic liberation from a streptococcal focus. This latter type of lupus erythematosus does in many instances respond dramatically. Cases are, however, liable to severe reactions during treatment and seem abnormally sensitive to sulphonamides, possibly by the temporary liberation of further toxins through the action of the drug on a focus of infection. In this condition it is therefore wise to commence treatment with very small doses, such as a half tablet eight-hourly, increasing to 1 tablet eight-hourly in the second week and probably giving a further course of the latter, or greater, dosage after an interval of two weeks. Some of the cases so treated relapse after an apparently satisfactory result, but the results are sufficiently encouraging to indicate the use of sulphonamide as a routine in suitable cases, since the disease is often so resistant to other forms of treatment.

Erythema multiforme. — Hughes (1941) and others have reported very satisfactory results in the treatment of this toxic eruption with sulphonamide. My own experience in using average doses of M. & B. 693 has not been so good although a few cases have responded well; in persistent cases in which no infected focus can be found the administration of the drug may be of value.

Acute Psoriasis. — This type of psoriasis, generalised and papular, is often associated with a residual tonsillar infection after scarlet fever and may be amenable to treatment with 1 gramme of M. & B. 693 eight-hourly for two weeks; the focus of infection must also receive appropriate treatment at the same time and the local condition will also call for a suitable application.

Chancroid.—The treatment of this condition has been simplified since sulphonamide (15 gr. eight-hourly for two weeks) has been used in the treatment. Both the local sore and the associated buboe respond rapidly, and it is seldom necessary to aspirate or incise a buboe if the sulphonamide treatment is employed. Reports have also suggested that lympho granuloma inguinalæ responds in the same satisfactory manner, but in the two cases which I have seen the results have been disappointing although the spread of the condition has to some extent been prevented.

GROUP II.

Varicose Ulceration.—The local application of sulphonamide ointment will often produce the most striking and rapid improvement in chronic varicose ulceration. There is no indication for internal medication; it is necessary to treate the varicosity with posture, support or occlusive measures. The local sulphonamide probably reduces secondary infection and the progress may appear to be arrested after an encouraging early response; in these cases some healing application such as desitin ointment will now often complete the treatment although it may previously have failed.

Sycosis barbæ.—During treatment of other conditions with sulphamethylthiazole (M. & B. 838) a most striking improvement occurred in two cases. Both these cases relapsed after chemotherapy because associated factors, such as dental sepsis, had not been attended to at the same time. Unfortunately, neither of these cases attended for further treatment, and I have not since had the opportunity of trying the compounds on further cases. It is probable that thiazamide (M. & B. 760) will also give similar results in the treatment of this condition and, when adequate supplies are available, it will be worthy of careful assessment.

Pustular Psoriasis.—Temporary improvement can frequently be obtained in this condition by the administration of M. & B. 693, two tablets eight-hourly for seven days; the condition will recur on cessation of treatment in the majority of cases unless the underlying factors have been detected and treated.

Thompson (1940) and others have reported the use of sulphonamide in certain of the acute fevers.

Scarlet Fever.—The drug has no apparent effect on the initial toxæmia or rash; the latter is a toxic manifestation, and sulphonamide has not been shown to have any action on toxins. Similarly, the drug is without effect on the incidence of complications, such as nephritis, which are of toxic origin; on the other hand, the complications which are associated with the invasive powers of the organism, such as adenitis and otitis, are satisfactorily influenced by the administration of the compounds in adequate dosage. The policy of administration of the compounds as a prophylactic measure during the weeks which intervene between the initial fever and the relatively late incidence of complications is to be deprecated. In the present mild epidemics, at least, the drug should be reserved for use in necessary cases when and if invasive complications ensue; in this way the risk of toxicity from the drug and the possibility of drug resistance can be minimised.

Measles.—The complications in this disease are generally associated with a secondary infection by an hæmolytic streptococcus and the sulphonamide drugs are of great value if employed in a dosage suitable to the age of the patient, but there is no reason to suppose that the uncomplicated disease is beneficially influenced by the use of the compounds.

Smallpox.—M. & B. 693 is considered to lower the mortality rate if administered during the pustular stage when there is secondary fever with streptococcal infection of the skin.

Sulphonamide compounds have been considered to have an action on certain virus diseases and, among other conditions, have been used for herpes simplex, herpes zoster and lichen planus, but there is no indication that they have been of therapeutical value. Successful treatment of epidermophytosis with sulphonamide powder has also been claimed, but other measures are probably more suitable unless there is evidence of considerable secondary infection.

DRUG ERUPTIONS.

Apart from their therapeutic value in the treatment of skin diseases, sulphonamide compounds are of dermatological interest on account of the drug rashes which are not an uncommon complication of their use. The majority of these eruptions appear between the eighth and fourteenth day of treatment and seem to depend more on this time factor than on the total dose administered. A maculo-papular or morbilliform rash on the trunk and limbs is the most frequent type encountered, but rashes of scarlatiniform, urticarial and varioliform type are not uncommon, while, occasionally, photosensitisation occurs with an œdematous erythema on the exposed parts of the body. This latter type of rash usually appears earlier in treatment, often after three or four days' administration, and has been more common in the summer months or after exposure of the patient to artificial sunlight—a form of treatment which should rigidly be forbidden during chemotherapy. With Thiazamide (M. & B. 760) a rash resembling erythema nodosum has been observed and is probably the most frequent type seen during treatment with this compound.

It seems probable that the production of these drug rashes is dependent on several factors (Erskine, 1939, 1); sensitisation to the compounds, drug retention, liberation of toxins from a focus of infection and the development of photosensitivity appear to be responsible in different cases. The elimination of sulphonamide in the urine can be tested by means of Werner's test, in which 1 c.c. of 3 per cent. para-dimethyl aminobenzaldehyde in 7 per cent. sulphuric acid is added to 5 c.c. of ten times diluted urine. This gives a flavine yellow colour in the presence of sulphonamide and, with practice, it is possible to make a rough quantitative estimation of the excretion of the drug. In the majority of the eruptions it is found that elimination appears to be satisfactory, and in these cases the rash is probably a result of a sensitisation of the patient to the compound. If the drug is continued in the same or smaller dose, it is possible to desensitise the patient, while at the same time treatment can be maintained, and the rash will fade in a day or two which is much more rapidly than can be obtained if the drug is discontinued. If the drug is stopped on account of a rash due to sensitisation, the patient can remain sensitised for long periods and, if sulphonamides are given, even months later, one tablet may reproduce the rash or sometimes cause alarming symptoms of an allergic response to the drug (Erskine, 1939, 2). When exception is greatly reduced, it is possible that the eruption is associated with drug retention and the further administration of sulphonamide should cease; elimination of the drug can be hastened by the use of diuretics and an increased fluid intake. Similarly, if it appears that the drug has caused a rash due to the liberation of toxins (such as in the treatment of lupus erethematosus) it is advisable to reduce or stop the administration temporarily; these toxic eruptions are usually of a scarlatiniform type.

Evidence of mild liver derangement is frequently found in drug rashes of the photosensitisation type and here again the discontinuation of the sulphonamide compound is indicated.

The differential diagnosis of the toxic eruptions resulting from sulphonamides may be difficult, especially when the patient withholds information that he has been taking the compounds. A rash between the eighth and fourteenth day of known sulphonamide therapy is highly suggestive and in other cases the demonstration of a positive Werner's test may be helpful. The rashes often resemble the acute exanthemata and pyrexia, lachrymation, pharyngitis and glandular enlargement, which may often be associated, make the problem one of considerable difficulty in considering the scarlatiniform and maculo-papular types of eruption. The sulphonamide eruptions are not generally associated with (additional) malaise and are transitory, so that in doubtful cases the diagnosis may perhaps be deferred pending the response to appropriate treatment. In all rashes suspected of being sulphonamide dermatitis a blood picture is of considerable importance, as damage to the bone marrow may be threatened at the same period, while, further, the blood picture may be of additional help in establishing the differential diagnosis.

Although about 15 per cent. of cases on prolonged chemotherapy develop drug rashes of one type or another, this incidence can be greatly reduced by restricting the period of administration to seven days whenever it is possible.

REFERENCES

Barber, H. W., *Brit. Journ. Derm. Syph.* (1941), Vol. 53, pp. 1–18, and pp. 33–45.

Erskine, D. (1) *B.M.J.*, 1939, ii, p. 104. (2) *B.J.V.D* 1939, Vol. XV, pp. 260–268.

Erskine, D., and Royds, J. E., *Lancet*, 1939, 2, p. 1366.

Hughes, P. P., *Arch. Derm. Syph.*, 1940. 42. p. 33.

Thompson, A. R., *Pract.*, 1940, 144, p. 52.

Sector News

Guy's Letter

CHRISTMAS again, but this time bereft of most of its trimmings! There is the acute problem of presents, and we find that the age of chivalry is not yet passed, for many are sacrificing their coupons for the flimsy garments of their feminine friends—gallant disciples of Sir Walter himself. The epicureans will find less scope for gourmandising and the devotees of Bacchus may be checked in their worship. However, we shall probably have a "good time," and any notable revels of the society here will be reported in the next letter.

The students are worried about the Home Guard. There is no question of shirking their duties, for some have joined already, and all would do so if it was generally thought necessary. But at present the decision is left to the Medical School; and ours, in contrast to most others, is giving no exemption on academic grounds. No doubt this is a subtle compliment to the ability of the Guy's student, in being able to pursue both these studies; yet they feel that it may be a handicap to success in exams. Surely, any decision should affect all medical students. No one would hesitate then, and the position would be similar to that of the dressers here in the last war, who, in khaki, paraded every morning in the Park to the orders of the stentorian voice that we know so well to-day. It matters not whether street-fighting or medical duties will be their concern in the day of crisis, for experience shows that everyone should have some knowledge of the tommy-gun, flame-thrower, hand grenade, and all the other refined developments of the combative instinct.

We hear that the R.A.M.C. officers enjoyed their week-end with us. It was a full programme indeed, and covered a large field, which included a lively debate on burns, Saline *v.* Tannin, and, after a fierce struggle, a truce was declared. At times they were placed in a tantalising position; for once, after a dissertation on treatment of a common lesion by radiant heat, infra-red, diathermy, etc., one remarked pathetically that the only equipment he possessed was one perished roll of elastoplast and some flavine.

Mr. Layton has refreshed us by introducing talks on subjects outside medicine. First, an M.P., then a Secretary of the Treasury, and both meetings were declared open. Questions were flung relentlessly at the speakers, and we were particularly impressed by the explanation that the latter gave of the remarkable inter-departmental evasive action of the Civil Service, which, we, the lay mind, had come to regard as a form of conspiracy against the public. Forgive us, gentle reader, if space prevents us from repeating this revelation.

The news that Mr. Atkins is leaving us for the Army has come as a great blow. We shall miss him very much indeed, and envy those who will now have the pleasure of working and living with him.

We send the New Year's greetings to the other Sector hospitals—a grim panorama ahead, it seems, with the whole planet at war. Yet the world 'tis a strange place, with its changeful discord of human life; and we will take a thought from G. B. S. in saying: "Well, sir, you never can tell. That's a principle of life with me, sir, if you'll excuse my having such a thing."

C. F. H.

Farnborough Letter

THE Christmas spirit is again invading our precincts; little trees and sand-tubs, crinkled paper and other like impedimenta are appearing in Sisters' rooms, and there have been whispers that one ward at least has been promised a turkey. A Christmas dance was held this week to help kindle the festive warmth. The dance, as a matter of fact, was threatened at the outset with disaster, as the Guy's Swingtette, which had been advertised to appear, found itself unable to oblige; fortunately the situation was saved by Mr. Howe, the chief ambulance-driver, who mustered a more than adequate band at very short notice. Paper hats were also produced and the frolics proceeded. Those present included the Superintendent, Matron, the Farnborough Assistant Matron, the Guy's Assistant Matron and Mr. Hamilton.

The Nurses have again covered themselves with glory in the recent State examinations; a 100 per cent. pass in both parts was achieved for the second time in succession. In congratulating the Nurses concerned we feel that great praise is also due to Sister Florence and the ward-sisters for maintaining the evidently high standard of training despite the difficulties of the times.

The routine of the Hospital has been somewhat disturbed during recent weeks by a series of wards going into quarantine. These included the male reception, both children's wards and a hut. At one time the only functioning half of the female reception ward was also menaced by a similar fate, but the official conscience on that occasion was finally appeased by a stoving. The other half of Bromley is now occupied by the obstetric department, who have had to evacuate part of their own terrain because of the inadequate ventilation resulting from the blast-walls. However, the infectious patients have now been suitably distributed and the taboos are gradually disappearing.

In conclusion, we wish our readers a happy New Year!

V. G.

Orpington Letter

SHOWING marked signs of cerebral confusion, including agraphia, aphasia, and mild inco-ordination, Manning sped up to Scotland recently, and after a brief honeymoon, returned a married man. All signs and symptoms have now disappeared, and we wish the happy couple every success and the best of luck!

We are sorry to have to report sickness in our midst, especially as the sufferer is none other than the hospital superman—Budd. After enduring his malaise with considerable fortitude for some time, he was prevailed upon to retire to bed for investigation and therapy.

How horrified and amazed we were when we learned that he had succumbed to an attack of glandular fever, with a leucopænia so profound that even Dr. Colbeck was hard put to find a respectable number of polymorphs. But an iron constitution and a most unpatriotic diet have combined to set the patient well on the road to recovery. At present he sits up in bed and leers at his numerous visitors in a rather sardonic fashion, at the same time eructating vigorously. We all wish him a speedy convalescence and hope that he will be fit enough for Christmas.

While on the subject of Christmas it seems that festivities have already commenced. Matron very kindly lent her flat for the Sisters' Dance, which took place a few days ago—an affair which was distinguished for its combination of gaiety and aplomb. We gather that similar events are to take place in the near future, and can only hope that the Mess has sufficient stamina to make the grade.

In finishing, may we take this opportunity of extending to everyone the Compliments of the Season and wishing you all a Happy New Year ?

P. S. C.

Sherwood Park Letter

THE writer is fortunate in having plenty of spirits for Christmas and the New Year; if any reader has some turkey bones left over he is a better man than anyone else we know. Taken apart we wish everyone as happy a New Year as possible, and, in case the paper shortage is more acute next year, that goes for the next ten years as well!

News items from Hurstsmead all bear on the subject of a highly successful evening dance held there a few weeks ago. The Calverley was "blitzed" early on in the evening, when the party seemed to be more "stag" than we hope it was later on.

Sherwood is rather quiet at the moment; apparently the sheep have been separated from the goats, but soon there will be no lack of company for the permanent inhabitants.

D. P. N.

* * *

***The Editor* will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Authors who desire reprints of their papers should make their own arrangements with the Printers when they return their proofs. All contributions to be addressed to *The Editor*, who does not accept responsibility for the views expressed by contributors.**

Reviews

Twelve Periodontal Studies. By H. K. Box, D.D.S., Ph.D., Research Professor of Periodontology, Faculty of Dentistry, University of Toronto. London: Humphrey Milford. Oxford University Press, First edition, 1940. Pp. 251. *Price* 11*s.* 6*d.*

THE Author has taken a step in the right direction by prodiucng this small concise book. It contains a mine of knowledge essential to the correct treatment of periodontal conditions. The work is based on a series of lectures given by Dr. Harold Box to Final Year Students at the University of Toronto. It is divided into twelve chapters, each containing an independent study, but the sequence is clear and the presentation of the subject is unique.

The opening chapters give us a description of the associated structures of the mouth, a consideration of the mixed salivas and the determination of their *p*H valves. The problems of wear, the functions of the periodontal membrance and the effects of heavy functions lead us to a review of the modern current views on traumatic occlusion. The description of the pathological effects of traumatic occlusion on periodontal tissues and of pocket formation are worthy of very earnest study.

In the therapeutic considerations, Dr. Box recommends the use of the Dunlop method of insufflation. The results which are claimed by its use in conjunction with the more common procedures appear to warrant an investigation into his methods of treatment. This book is very strongly recommended to all Final Year Students.

Text-book of Nursing. By EVELYN PEARCE. Published by Faber and Faber. *Price* 1*s.*

MISS PEARCE'S *Text-book of Nursing* is already too well known and popular to need further introduction. This latest edition has been brought well up to date and there have been many more illustrations added. The wealth of nursing detail is one of the best features of the book, and although a " comprehensive " text-book on nursing is an ideal impossible of achievement, this one goes a long way to meet the demand.

H. M. G.

Sport

Guy's v. St Thomas's

(*Played at Honor Oak Park on Saturday, October* 11*th*.)

BOTH sides were at full strength and a close game was anticipated, but Guy's forwards dominated the game to such an extent that only occasionally did St. Thomas's outsides see the ball. Guy's had the ball consistently from the scrums and the majority of the line-outs, which led to Scott having a field day and giving a good service from the scrum.

The opening period was very spirited. St. Thomas's attacked and Ritchie missed a penalty kick. Guy's three-quarters got on the move with some nice handling; a punt ahead was taken by Ballantyne, but his kick was charged down. This was followed by Strathie almost getting over, and a second later he hit the post with a drop-kick.

Following a nice movement with all the outsides handling, Brangwin was brought down for a scrum on St. Thomas's " 25 " line, from which Scott tried to steal away on the blind side. From another scrum Scott sent Strathie away, Camp took a long pass and with a deceptive swerve ran through to the posts for Mullins to add the extra points.

Guy's continued to attack but Gartrell could not pass Lockton. Brangwin was tackled as he took a reverse pass from Camp, and from the resultant scrum St. Thomas's were penalised and Mullins kicked the goal.

Guy's forwards made ground with a dribble, Breen-Turner followed up nicely, and then Gartrell was tackled. St. Thomas's carried play to Guy's " 25," but the forwards relieved with a fine rush and Wade tried to dash through, but was overpowered by numbers. Two chances came Guy's way, first by Brangwin and then Strathie, but their passes were dropped at the crucial moment. Half-time arrived with Guy's leading by 8 points to nil.

Immediately after the resumption Strathie found touch by the corner flag; it looked suspiciously like an attempt at a drop. From the line out a scrum on the line led to Scott pouncing over for Mullins to convert.

Ritchie led a St. Thomas's attack and just missed with a drop-kick. St. Thomas's persisted for a few seconds, but were prevented from making headway by some hard tackling by our forwards. Gartrell made a nice run, but his pass was dropped, but from a line-out Breen-Turner gained possession and ran straight to the posts, although molested, for an unconverted try.

Scott tried to barge through a crowd of players but was overwhelmed; Mullins had a chance with a penalty kick which just failed; Gartrell and then Lee made efforts to break through; and Strathie missed with another drop-kick. Lewis did not reach touch with a long kick, but followed up swiftly to collar an opponent in possession; the forwards were round smartly and from a quick heel Strathie went clean through for a try, and Mullins kicked his fourth goal.

Another unsuccessful attempt at a drop by Ritchie was followed by Scott breaking away from a scrum, Strathie took his pass and, on facing the full back, transferred to Lillywhite, who scored by the posts but the kick failed.

To complete the scoring Camp was hemmed in on the touch-line but gave a reverse pass to Brangwin who wriggled along the St. Thomas's line to touch down near the posts, but no goal points were added.

Undoubtedly the excellence of Guy's forwards was the contributory factor to this big score; they played as a real pack and took every opportunity in getting the ball to the three-quarters who would have done even better had they not dropped so many passes. Score: Guy's, 3 goals, 1 penalty goal, 3 tries (27 points); St. Thomas's, nil.

Team.—T. L. T. Lewis; R. F. Camp, P. L. Brangwin, W. H. Lillywhite, P. C. Gartrell; D. M. Strathie, N. I. Scott; B. H. Wilshere, R. M. Sharpe, A. B. Lee, A. G. Albers, J. Breen-Turner, G. F. Swann, T. W. Renton, M. R. Mullins (captain).

Guy's v. London Anti-Aircraft XV

(*At Honor Oak Park on Saturday, October* 18*th.*)

THE Army side were thoroughly beaten by a Guy's team playing at the top of its form, and when no-side was called Guy's had piled up 35 points to the Anti-Aircraft 5 points.

Once again the Guy's forwards excelled themselves, doing everything expected of a well-drilled pack, getting the ball to their outsides, backing up to take part in any three-quarter movement, and their tackling was deadly when their opponents looked dangerous. Although slightly built Walton performed most creditably as hooker on his first appearance.

In the first minute Mullins opened the score with a penalty kick, then followed long periods of pressure which the Army side found it difficult to repel. The Army full-back was collared in possession from a punt ahead by Brangwin, and Camp nearly went over. E. J. H. Williams, on the Army wing, was a great danger and early on was tackled by Lewis in the nick of time. Guy's forwards carried play to the other end, but when the ball got to the three-quarters a pass was dropped. Lee and Breen-Turner indulged in a nice bout of passing, which ended in Gartrell touching down for an unconverted try.

Following runs by E. J. H. Williams for the Army, and Gartrell for Guy's, both of which finished in touch, the Army XV defended stubbornly. Before the interval Breen-Turner scored two tries, both of which were converted by Strathie. The first came from an opening made by Swann, and the second an individual effort by picking up from a loose scrummage.

Early in the second half the Army XV attacked and Maconchy reduced the lead for Sharp to convert. This was a danger signal to Guy's, who took complete command and never allowed their opponents another chance. Wilshere almost got through with a grand dribble, and later Hildick-Smith nearly sent Gartrell over from a three-quarter movement. A scrum in the Army "25" led to Swann touching down from a pass by Gartrell, but the kick failed.

The rate of scoring increased as the Army XV collapsed under the pressure. Possibly they had too much to do in defending their line during the first half. Mullins and Strathie had a fine passing movement until a pass was dropped by a three-quarter. The three-quarters handled beautifully in the next run, to be followed by Strathie cutting through the centre, Brangwin took the pass and sent Camp in for an unconverted try.

A knock on spoilt a promising movement by Scott, Strathie and Swann, and Camp brought off a nice tackle to stop E. J. H. Williams. A dodging run by Strathie led to Camp taking a pass and run round to the posts for a try which Brangwin converted. The Army had a chance when McCormack got through, but he kicked ahead and the ball went dead. Gartrell looked well set for a try from a swerving run, but an opponent got his ankle with a low tackle, and a nice move by Scott ended in a dropped pass, but Brangwin made a vigorous dash to the corner for a try which was not converted.

The scoring ended with a nice bit of handling by Strathie, Hildick-Smith and Gartrell for the latter to run round to the posts for Lewis to convert. Score: Guy's, 4 goals, 1 penalty goal, 4 tries (35 points); London Anti-Aircraft XV, 1 goal (5 points).

Team.—T. L. T. Lewis; R. F. Camp, P. L. Brangwin, G. Hildick-Smith, P. C. Gartrell; D. M. Strathie, N. I .Scott; B. H. Wilshere, G. Walton, A. B. Lee, A. G. Albers, J. Breen-Turner, G. F. Swann, T. W. Renton, M. R. Mullins (captain).

Hospital Information, etc.

Pass List

CONJOINT BOARD.
FINAL EXAMINATION.

October, 1941.

Surgery.

S. H. Bockner
P. B. Counsell
D. G. Dixon
R. A. H. Dubery
P. R. C. Evans
D. H. King
B. Kustow
G. H. T. Lloyd
V. H. Martindale
M. J. May
L. F. Miller
D. D. L. Rees
W. J. Stevens
S. D. Stock
J. Wilks

Midwifery.

W. E. S. Bain
G. G. B. Blackman
V. Y. Bockner
C. M. Dave
G. H. Dhenin
B. Frank
J. D. Grene
E. J. Grierson
E. O. Hohn
R. H. Hughes
J. A. Irwin
O. M. Jonathan
E. O. W. Jones
H. G. King
W. J. Lewis
I. M. MacArthur
J. B. Musgrove
H. F. Osmond
J. Pinching
F. H. Staines
M. N. Teubes
G. E. Thomas
R. J. Walker
T. A. Werner
E. Williams

Pathology

J. F. R. Bentley
H. V. Cockburn
D. P. Davis
G. W. Downes
R. J. Forster
*J. H. G. Halliday
P. W. Hopper
M. J. May
D. McGregor
J. M. Munden
D. S. Orr
J. D. Paulett
*D. I. Thomas
C. H. Watts
E. Williams
T. R. Wooldridge

Medicine.

*P. Baxter
*D. W. F. Charlton
*N. F. Clarke
*B. U. Coffey
*R. A. Craig
F. K. Crittenden
*M. C. Cross
W. G. Cross
*F. M. P. Eckstein
R. Franey
D. P. Finnegan
*J. G. Goodhart
*B. P. Griffin
*J. H. G. Halliday
*A. W. Hind
J. R. Lauder
*R. Leigh
N. P. W. Littler
*G. MacVicar
*L. R. McLaren
P. B. Maxted
D. W. Mayman
D. S. Orr
A. C. Parkinson
H. G. Phillips
J. Pinching
*W. A. Porter
*R. J. W. Rees
*H. A. Ripman
P. E. Steele-Perkins
F. G. Stoddart
*D. I. Thomas
*D. G. Vulliamy
*D. P. Walther
*D. H. Wright

* Have now completed the examination.

ROYAL COLLEGE OF SURGEONS
F.R.C.S.
FINAL EXAMINATION.

December, 1941.

E. W. O .Adkins
F. N. Glover
S. I. Green
A. R. Leask
B. G. A. Lilwall

UNIVERSITY OF CAMBRIDGE.
FINAL M.B. EXAMINATION.

Michaelmas Term, 1941.

PART I.

Surgery, Midwifery and Gynæcology.

B. G. C. Ackner
W. E. S. Bain
G. P. Baker
J. W. A. Crabtree
M. C. Cross
G. H. Dhenin
J. B. Foote
E. C. Poulton
W. E. Roden
G. E. Thomas
R. J. Walker

Papers by Guy's Men

Kark, Robert, and Another. The response to Vitamin K. A liver-function test. *Lancet*, 1941, ii, 693.

Cameron, H. C. Fifty years' progress in Pædiatrics, Rickets and Tetany. *Clin. J.*, 1041, **70**, 309.

Attwater, H. L. The treatment of Prostatitis. *Med. Pr.*, 1941, **206**, 399.

Changes of Address

H. F. Vandermin, M.D., The White House, Mickleton, Campden, Glos.

Geoffrey Marshall, M.D., F.R.C.P., 149, Harley Street, W.1 (Tel.: Welbeck 4444. (*Omitted by inadvertence from London Telephone Directory*).

Honours

M.B.E.

The M.B.E. has been awarded to Lieut. George Dunluce Eccles, M.C., M.B., B.S. (Home Guard), in recognition of conspicuous gallantry in carrying out hazardous work in a very brave manner, and to W. L. M. Bigby, M.B., B.S., Assistant Medical Officer of Health for Civil Defence, for conspicuous service during enemy attacks on a town.

Prisoners of War

H. J. Lewis, A. D. Corps.

Births

FORBES.—On October 12th, 1941, at Johannesburg, to Dorothy, wife of Captain Arthur Forbes, S.A.M.C.—a son, Anthony Arthur.

LUNN.—On December 12th, 1941, at Guildford, the wife of Captain H. Fletcher Lunn, R.A.M.C.—a daughter.

Marriages

MANNING—FORD.—On November 29th, 1941, at Carnoustie, Scotland, Frank Robert Cassels Manning to Mary Pullen Smith Ford.

Death

PEATSON. — On September 23rd, 1941, Joseph Clarence Stanhope Peatson, at 116, Mayfield Road, Sanderstead, age 75 years.

FARARA.—On December 11th, 1941, A. E. E. Farara, Captain A.D. Corps.

EDS. { N.A.N.
B.S.L.

The Wills Library
Guys Hospital Medical School
London. SE1 9RT